

PRELIMINARY ECOLOGICAL APPRAISAL

69 Gaw Hill Lane Aughton Lancashire



PRELIMINARY ECOLOGICAL APPRAISAL

69 Gaw Hill Lane Aughton Lancashire

A report for

Wignall's Chartered Surveyors 311 Hesketh Lane, Tarleton, Preston, PR4 6RJ

Report authors

Pennine Ecological 1 Moss Cottage North Road Bretherton Nr Leyland Lancashire PR26 9AY

Tel. (01772) 600441 email: <u>ian@pennineecological.co.uk</u> web: <u>www.pennineecological.co.uk</u>

Ian Ryding

July 2023

PRELIMINARY ECOLOGICAL APPRAISAL

69 Gaw Hill Lane Aughton Lancashire

TABLE OF CONTENTS

CONTENT	PAGE NO.	
PART 1	INTRODUCTION:	
1.1	Reasons for Survey	1
1.2	Site Location	1
1.3	Survey Methodology	1
1.4	Survey Constraints	1
PART 2	SURVEY RESULTS:	
2.1	Executive Summary	3
2.2	Desk Based Study	3
2.3	Extended Phase 1 Habitat Survey	4
2.4	Great Crested Newt Evaluation	7
2.5	Preliminary Bat Roost Assessment	7
2.6	Evaluation of Other Features	16
PART 3 S	UMMARY EVALUATION & RECOMMENDATIONS:	
3.1	Summary Evaluation of Findings	20

3.2 Recommendations 21

REFERENCES:

Terms of Use

This report has been compiled by Pennine Ecological with all reasonable skill, care and diligence within the terms of the instruction and permissions granted by the client. The results, conclusions and recommendations of this report are proportionate and in line with the British Standard 42020:2013.

This is a technical report and does not represent legal advice/opinion.

The report is for the sole use of the commissioning client in connection with the development project described in the report, and must not be used for any other purpose, copied, re-produced or sent to any other party other than the Local Planning Authority without the permission of Pennine Ecological.

This report remains the property of Pennine Ecological and cannot be relied upon until full payment has been made. Pennine Ecological reserve the right to retract any survey reports submitted to planning where payments are outstanding.

Pennine Ecological will retain the right to re-publish data obtained, and to forward data collected during all its ecology surveys to the local wildlife records centre.

PART 1: INTRODUCTION:

1.1 REASONS FOR SURVEY:

Pennine Ecological have been commissioned by Wignall's Chartered Surveyors, to undertake a Preliminary Ecological Appraisal at 69 Gaw Hill Lane, Aughton, Ormskirk, Ormskirk, Lancashire, L39 7HA.

The study is required in association with a proposal to demolish the property and construct a single new dwelling on the site.

The surveys were undertaken by Ian Ryding a surveyor with over 36 years' experience in a wide range of ecological survey and assessment.

1.2 SITE LOCATION:

69 Gaw Hill Lane, Aughton, Ormskirk, Ormskirk, Lancashire, L39 7HA.

The property is also known as Marbleton Kennels.

Central grid reference SD 3961 0730

The location of the study area is shown on Map 1 in this appendix.

1.3 SURVEY METHODOLOGY:

The methodology applied is as follows.

1.3.1 Phase 1 Habitat Survey:

A Phase 1 Habitat Survey (*Nature Conservancy Council 1990*) of the survey area was undertaken on the 19th July 2023. The site's habitats were fully mapped and higher vascular plant species (where present) were recorded and given abundance values according to the standard DAFOR scale where:

- D = Dominant
- A = Abundant
- F = Frequent
- O = Occasional
- R = Rare

Where appropriate the above values can be prefixed by the letter L (locally) or V (very), to provide more subtle biogeographical data.

1.3.2 Preliminary Bat Roost Assessment:

The Preliminary Roost Assessment (PRA) was undertaken on the 19th July 2023. following the methodology outlined in *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)* Collins, J. Bat Conservation Trust (2016)

The survey included the following standard non-intrusive searches for potential roosts in the buildings on the site.

• Searches for feeding remains, staining and bat droppings on floors around the edge of the interior/exterior walls.

• Searches for suitable entry and exit points in gaps between masonry, around eaves, soffits, ridges, flashing and/or under roof sheets etc.

The building's exterior and interior was surveyed from ground level using close focusing Leica 8x32 binoculars, and was undertaken by an experienced preliminary assessor of bat roosts and an accredited agent on Mr Stuart Macpherson's Natural England Class 2 bat licence (2021-10079-CL18-BAT).

The three garden trees on the site were also surveyed.

1.3.3 Barn Owl Survey:

The site was visited on the 19th July 2023 and the buildings affected searched for typical signs of occupation using guidance provided by the Barn Owl Trust.

It is acknowledged that the survey was undertaken during the 'typical' breeding season of barn owl which is April-October, and it is confirmed that the survey was conducted in a non-intrusive and considerate manner.

1.3.4 Other Species:

During the survey, observations relating to the potential presence of badger was also undertaken. The potential presence of great crested newt (GCN) on the site and in the local area was also evaluated.

Evaluation relating to the potential presence of breeding and wintering birds on site and in the adjacent farmland were also made.

1.3.5 Surveyor Experience:

The surveyor and author of this report, Ian Ryding, has over 36 years' experience in ecological survey and evaluation. Key skills include the following.

- Extended Phase 1 Habitat Survey/Preliminary Ecological Appraisal and National Vegetation Classification Survey.
- Highly proficient field botanist, including some difficult plant groups.
- Mammal surveys including surveys for badger, water vole, otter, brown hare and preliminary bat roost survey.
- Breeding and wintering bird survey.
- Expert witness delivering proof of evidence in respect of nesting birds at public inquiry in 2018 and 2020.
- Extensive experience in great crested newt (GCN) survey, evaluation, licensing and mitigation. Natural England Class Licence WML-CL08 held.
- Ecological Evaluation and Impact Assessments in association with large scale commercial development and civil engineering.

1.4 SURVEY CONSTRAINTS:

There were no constraints to the survey.

PART 2 SURVEY RESULTS:

2.1 EXECUTIVE SUMMARY:

- The site has no statutory or non-statutory designations.
- There are no statutory sites within 6km of the proposal.
- There are no non-statutory sites with 2km of the site.
- The site is located within the Sensitive Waterbird Area (SWA) for pink-footed goose (PFG), and outside the SWA for whooper swan, and it can be conclusively stated that there is no wintering bird habitat on the site, and direct/indirect impacts on the statutory sites are not predicted.
- The proposals affect a house, garage and various small buildings associated with the breeder's kennels that operates from the site. A grassed dog exercise area and small areas formal gardens also occur.
- The habitats affected by the proposal are very common on a national-local scale and have 'low' biodiversity interest and are of 'site' value only.
- The evaluation in relation to GCN has concluded that the proposal site is isolated from any potential GCN population by a distance of over 300m. There is also very extensive good terrestrial habitat in close proximity to the GCN ponds, and the likelihood of GCN being affected by the proposal is considered to be remote.
- The buildings affected are a mid-20th century dormer bungalow and a collection of single-storey, simply constructed kennels and ancillary buildings.
- Building 1 (B1) contained several potential roost features and has 'moderate' bat roost suitability and further survey is required.
- Buildings 2 6 and all trees have 'negligible' bat roost suitability and no further surveys are required in relation to these structures.
- It can be confirmed that all of the buildings on site are unsuitable for barn owl occupation.
- No evidence of nesting birds was found in any of the buildings, but the trees and shrubs collectively are capable of supporting low numbers of common birds of 'local' value only.
- The survey revealed no evidence of use of the site by badger.

2.2 DESK BASED STUDY:

Statutory Sites:

The Multi Agency Geographical Information Centre <u>www.magic.gov.uk</u> was referred to in respect of the biological statutory sites.

- Ribble and Alt Estuaries (SSSI/SPA/Ramsar) is located 8.8km west of the site.
- Martin Mere (SSSI/SPA/Ramsar is located 6.9km north-east of the site.
- Sefton Coast (SSSI/SAC) is located 7.7km west of the site.

Following the end of the Brexit transition period, the sites of international nature conservation importance are now known as the national site network (previously Natura 2000 sites).

The national network sites include Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) and are of exceptional importance in relation to rare, endangered or vulnerable species and/or habitats.

Non-statutory Sites and Protected Species Records:

It was decided in advance that the decision to request data from Lancashire Environmental Record Network (LERN) to obtain details of any biological records relating to the site, would be based on the findings of the survey.

In this instance, it was confirmed that the site has no non-statutory designations, and the evaluation showed that the effect of the proposals did not extend beyond the boundary of the site, and that the site was of 'site value' only. Therefore, LERN data was not required.

Reference to Magic data showed that there are seven Great Crested Newt Class Survey Licence Return (2016) located between 413m – 839m north of the site. There are no Great Crested Newt Pond Survey 2017-2019 records within 2km of the site.

Magic data shows one four granted EPSL (bats) within 2km of the site and include the following.

- Granted EPSL 2019 Common pipistrelle bat. (1.33km north-east).
- Granted EPSL 2018 Common pipistrelle bat. (1.24km south-east).
- Granted EPSL 2019 Common pipistrelle and soprano pipistrelle bat. (1.34km southeast).
- Granted EPSL 2016 Common pipistrelle bat. (1.6km south-east).

In addition to the above, Pennine Ecological's dataset collated from the many surveys undertaken and observations made by the company since 1996 were also referred to.

Desk based studies were undertaken to establish the presence of ponds within a 250m radius of the site, as part of a scoping study relating to great crested newt (GCN)

Pennine Ecological data revealed the following information.

Biological Heritage Sites:

There are no Biological Heritage Sites (BHS) within 2km of the proposal site.

Protected Species:

The site is inside of the Sensitive Waterbird Area (SWA) for wintering pink-footed goose.

2.3 EXTENDED PHASE 1 HABITAT SURVEY:

2.3.1 General Description:

The site of the proposed development is composed of a detached dormer bungalow with associated gardens, yard and patio areas, a series of outbuildings used for the kennels that operates from the site, and a small area of improved grassland used as a dog exercise area.

The surrounding land is arable with a new housing development abutting the southern boundary of the site.

Gaw Hill Lane fronts the property.

2.3.2 Phase 1 Habitat Survey Target Notes:

Survey locations, Target Notes and the proposed working area locations are shown on Map 1 in the Appendix. Note: All species nomenclature follows Stace, C. (1996) 'New Flora of the British Isles' - definitive English names.

Target Note 1:

An area of low-diversity, mown (modified) amenity grassland dominated by Yorkshire-fog with abundant red fescue, locally abundant *Viola* var. and frequent creeping buttercup.

Target Note 2:

Several small, linear stands of ornamental garden shrubs on the boundary of the property.

A single diseased coppiced ash and an oriental cherry var. are present.

Target Note 3:

A patio at the rear of the house that contains several small ornamental shrubs and a small oriental cherry and very small linear formal flower beds.

Target Note 4:

A small area of mown amenity (modified) grassland in the southernmost part of the site.

The grassland is very species-poor and dominated by perennial rye-grass with frequent creeping buttercup and very locally frequent common knapweed.

Common mouse-ear and greater plantain are occasional.

There is a narrow/sparse line of common nettle along part of the boundary with very occasional small scattered elder.

Photographs showing the general conditions on the site are provided below.

Site Photographs - Habitats:



Photograph 1: The amenity grassland on the frontage of the property described in Target Note 1. Looking east-west.



Photograph 2: The front lawn and the ornamental shrubs containing the oriental cherry and single ash described in Target Note 2. Looking east-west.



Photograph 3: The rear patio with small ornamental trees, shrubs and flower beds described in Target Note 3.



Photograph 4: The amenity grassland used as a dog exercise area described in Target Note 4.

2.4 GREAT CRESTED NEWT EVALUATION:

There are no ponds on-site and no ponds within 250m of the site.

The nearest ponds are at >300m south of the site and >400m north of the site, and there is no suitable terrestrial habitat connecting the ponds to the site.

The site itself is domestic/residential and supports no habitats of significant value to GCN.

Based on the location of the ponds in relation to the site there is no reasonable likelihood that GCN or its habitat or any other amphibian species will be adversely affected by the proposals.

2.5 PRELIMINARY BAT ROOST ASSESSMENT:

The preliminary bat roost survey was undertaken on the 19th July 2023 following the methodology outlined in *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)* Collins, J. Bat Conservation Trust (2016)

The survey included standard non-intrusive searches for potential roosts in the house and all of the ancillary buildings and trees on the site.

The owners/residents confirmed that the loft spaces are taken up by dormers and that there is no internal access to any roof voids that might be present.

2.5.1 BAT LEGISLATION:

All British bats and their roosts* are afforded protection under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579).

When dealing with cases where a European Protected Species (EPS) (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the Regulations, that has a statutory duty as the local authority to have due regard to the provisions of the Regulations in the exercise of its functions.

Use of buildings by roosting bats:

- a) Summer breeding roost (May-August)
- b) Hibernation roost (October-March)

c) Transitional or temporary roost (Mainly spring/summer months)

*The term 'roost' is generically referred to as a place that bats might use at any time of the year, however it should be noted that under the Conservation of Habitats and Species Regulations (2019) (EU Exit) (Regulation 43 (d) the term roost is not used but refers to "*a breeding site or resting place of such an animal*" and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation.

General Description:

The buildings affected by the proposal included the house (B1), a garage (B2) and a series of kennel blocks (B3 – B6).

The buildings are situated within the domestic curtilage of 69 Gaw Hill Lane.

Each of the buildings is described in detail below and their location is shown on Map 1 in the appendix.

B1:

A dormer bungalow estimated to have been constructed in the early 1960s.

There are dormers on the front and rear roof aspects and a single-storey flat-roofed extension projecting off the back of the house.

The construction type is standard with cavity walls throughout, and concrete tiles and matching angle ridge on the roof with the exception of the extension and dormers which have bitumen felt.

The dormers have 'Rosemary' tile cladding and decorative scalloped flashing, which has slipped locally.

There are UPVC soffits throughout, except for the dormers and rear extension where UPVC fascia boards are present. The fascias are generally tight fitting as are the soffits except for a hole in the south-west corner, and a gap at a soffit joint on the west elevation.

These holes are on the horizontal base of the soffit.

The roof is in generally good condition and has sections of flashing at the verge, along with a short section of dry verge.

The flashing is raised very locally creating small gaps.

Potential roost features (PRFs) include several small gaps behind the flashing and the two holes below the soffit as described above.

B2:

This is a single-storey flat-roofed garage of brick construction.

The roof is composed of bitumen felt with a timber soffit along all aspects.

The door is tight-fitting with no gaps.

The building is effectively sealed from bat ingress and there are no PRFs.

B3:

A pent-roofed timber shed of simple single-skin ship lap and plywood construction.

The roof is covered with bitumen felt.

There are no external features where bats might roost and the interior of the building is well lit and unsuitable for roosting bats. There are no PRFs.

B4:

A modern occupied kennel block with exterior runs.

The kennels are of modular construction with wall and roof panels of insulated coated steel sheeting that have no internal void spaces.

There are no void spaces and no holes and fissures (PRFs) where bats might possibly roost.

B5:

A small building of concrete block construction with a flat bitumen felt roof and no internal void spaces.

The building is in daily use and well lit by a modern UPVC casement window.

There is a timber fascia board fixed to battens with only a very shallow and exposed gap behind. There is substantial cobweb cover in those gaps and no hidden void spaces.

There are no PRFs in this building.

B6:

A prefabricated occupied kennel block with attached runs.

The roof is flat and covered in bitumen felt and the walls composed of insulated panels.

There are no internal void spaces.

There are timber fascia boards on some aspects all of which are tight fitting.

There are no PRFs in this building.

Trees:

The trees on the site include a semi-mature coppiced ash and a small oriental cherry in the front garden, and a single small cherry in the back garden.

All were found to have no holes/fissures suitable for roosting bats, and that roost suitability in these trees is 'negligible'.

The photographs below show the general conditions in the buildings surveyed.

Site Photographs: Bats:



Photograph 5: B1 – typical view of the east (side) elevation.



Photograph 6: B1 – typical view of the north and east (side) elevations.



Photograph 7: B1 - typical view of the east (side) elevation.



Photograph 8: B1 – typical view of the rear dormer and single-storey rear extension. Note tight-fitting UPVC fascia board.



Photograph 9: B1 – typical view of the east (side) elevation showing dormers and lead flashing at verge.



Photograph 10: B1 – front elevation looking west. Note tight fitting soffits.



Photograph 11: B1 – east elevation note gaps behind flashing on dormer at verge.



Photograph 12: B1 – south-east corner panel below soffit missing allows access to PRFs in soffit and possibly roof.



Photograph 13: B1 – west elevation – gaps between panels below soffit allow access to PRFs in soffit and possibly roof.



Photograph 14: B2 – typical view – flat roofed and tight-fitting door and soffits and no PRFs.



Photograph 15: B3 – typical view – pent felt roofed with single skin board construction and no PRFs.



Photograph 16: B4 – typical view – modern modular kennel block with runs - no PRFs.



Photograph 17: B4 – typical view – modern modular kennel block with runs - no PRFs.



Photograph 18: B4 – typical view – modern modular kennel block with runs - no PRFs.



Photograph 19: B5 – typical view – concrete block construction. Gap at fascia very shallow and exposed. No PRFs.



Photograph 20: B5 – typical view – concrete block construction. Gap at fascia very shallow and exposed. No PRFs.



Photograph 21: B6 – typical view – south and east elevations of pre-fab kennel block. No gaps at fascia. No PRFs.



Photograph 22: B6 – typical view – east elevation and runs of pre-fab kennel block. No PRFs.

2.6 EVALUATION OF OTHER FEATURES:

2.6.1 Breeding Birds:

It can be conclusively stated that none of the buildings on the site have any suitability for roosting or nesting barn owl.

There was no evidence of any other breeding birds noted anywhere on the site.

Nesting opportunities exist possibly in the garden trees and shrubs, and possibly in the hole in the soffit of B1.

Overall, the site is only capable of supporting very low numbers of common birds not exceeding 'local' i.e. Parish value.

2.6.2 Wintering Birds:

Reference to the Magic data revealed the following information regarding the local biological statutory sites.

- Ribble and Alt Estuaries (SSSI/SPA/Ramsar) is located 8.8km west of the site.
- Martin Mere (SSSI/SPA/Ramsar is located 6.9km north-east of the site.
- Sefton Coast (SSSI/SAC) is located 7.7km west of the site.

The Sefton Coast SSSI/SAC was scoped out of the wintering bird evaluation as its designation is not related to wintering birds.

In regard to the other sites, their SSSI, SPA and Ramsar site designations relate wholly or in part to their wintering wildfowl populations.

However, the site survey conclusively shows that the site is totally unsuitable for wintering birds as it is composed of habitats and an environment never used by foraging pink-footed goose (PFG) and whooper swan.

Based on the conditions observed on the site and in the surrounding area, and the foraging needs of both PFG and whooper swan, it can be conclusively stated that the site is not suitable for those species.

Sensitive Waterbird Area:

It is known that the site lies within the Sensitive Waterbird Area (SWA) for PFG.

The Sensitive Waterbird Area is defined based on tetrad counts over the period winter 2008/09 to winter 2017/18*

The Sensitive Waterbird Area includes all tetrads with a greatest regular use class of at least '1% Lancashire & North Merseyside Population', plus any adjacent tetrads that are regularly flown over by Geese and Swans.*

*See LERN Sensitive Waterbird Area v3a 22/11/2018

The SWA for PFG is known by the ecologist to be very extensive and extends north into Preston, South Ribble, Fylde, Wyre and Lancaster districts, and north-east into Chorley district.

As the boundary of the SWA is defined on a tetrad (2x2km squares) basis it also contains land that is not suitable and/or regularly utilised by PFG and whooper swan. Consequently, whilst a site might be located within the SWA, this doesn't mean that all of the land within the SWA is used by wintering birds or could ever be 'functional'.*

*Functionally linked land (FLL) is land used by at least 1% of the wintering population of any qualifying species of the SPA.

This is the case with the proposal site which is composed of a domestic property and associated garden land and ancillary buildings used as a dog breeders kennels.

The land abutting the proposal site to the south is a new housing development, while to the north there is a small arable field that is considered too small and subject to visual human disturbance to sustain foraging PFG.

The land to the east is potentially suitable for PFG and is large enough to accommodate foraging PFG.

Evaluation of the Effect of the Development on Wintering Birds of the SSSIs:

Given the important statutory status of the SSSI/SPAs as cited previously, Natural England's SSSI Impact Risk Zones (IRZ) Guidance was also consulted in relation to this project.

The SSSI IRZs can be used by Local Planning Authorities, developers and consultants in relation to planning applications, '*The Impact Risk Zones (IRZs)* are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs also cover the interest features and sensitivities of European sites, which are underpinned by the SSSI designation and "Compensation Sites", which have been secured as compensation for impacts on Natura 2000/Ramsar sites'.*

*SSSI Impact Risk User Guidance - see www.magic.gov.uk

The list of IRZ development categories and associated potential risks are as follows.

GUIDANCE – How to use the Impact Risk Zones

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?

2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. THE LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications:

All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi-natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures.

Infrastructure:

Pipelines, and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.

Wind & Solar Energy:

Solar schemes with footprint > 0.5Ha, all wind turbines.

Minerals, Gas & Oil:

Planning applications for quarries, including new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.

Rural Non Residential:

Large non-residential developments outside existing settlements/urban areas where net additional gross internal floorspace is >1000m² or footprint exceeds 2ha.

Residential:

Residential development of 10 units or more.

Rural Residential:

Any residential developments outside of existing settlements/urban areas with a total net gain in residential units.

Air Pollution:

Livestock & poultry units with floorspace >500m², slurry lagoons & digestate stores >4000m².

Combustion:

General combustion processes >50MW energy output. Including energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion.

Waste:

Landfill including inert landfill, non-hazardous landfill, hazardous landfill.

Composting

Not applicable.

Discharges

Any discharges of water or liquid waste that is more than 20m³/day to ground (i.e. to seep away) or to surface water, such as a beck or stream.

Water Supply

Not applicable.

Notes

Not applicable.

Results of the IRZ Guidance:

The proposal involves the demolition of the existing house and buildings and a new domestic property built on the site.

The proposals are self-contained and affect pre-existing buildings and formally managed land within the domestic curtilage that is composed of amenity grassland and hardstanding.

The habitats are of innately poor biodiversity value and have no value for wintering birds.

Using the guidance above, it can be confirmed that the application has some affinity with the 'All planning applications' category on account of it being outside any settlement and affecting greenspace with semi-natural habitats, i.e. domestic gardens.

This issue is discussed further in Section 3.1.4 of this report.

2.6.3 Badger:

No evidence of badger activity/occupation was found during the survey and the site is generally unsuitable for badger habitation. Based on the lack of badger signs, the species is considered to be absent on the site.

SUMMARY EVAULATION & RECOMMENDATIONS: PART 3

3.1 SUMMARY EVALUATION OF FINDINGS:

The field survey and evaluation of the site revealed the following information.

3.1.1 Vegetation/habitats:

The proposal will largely directly affect a house garden land and several ancillary buildings.

The habitats affected have innately poor biodiversity value, and collectively are of 'site' ecological value, with impacts not extending beyond the land containing the development site.

3.1.2 Great Crested Newt:

There are no ponds on-site and no ponds within 250m of the site.

The nearest ponds are >300m south of the site and >400m north of the site.

There is no suitable terrestrial habitat connecting the ponds to the site.

The site itself is domestic/residential and supports no habitats of significant value to GCN.

Based on the location of the ponds in relation to the site, there is no reasonable likelihood that GCN or its habitat or any other amphibian species will be adversely affected by the proposals.

3.1.3 Bats:

The buildings affected by the proposal included the house (B1), a garage (B2) and a series of kennel blocks and ancillary buildings (B3 - B6).

The proposal affects five buildings all of which will be demolished as part of the proposals.

The PRA has determined that the potential roost features (PRFs) in B1 collectively are of 'moderate' roost suitability.

Potential in B1 relates to crevice dwelling and possibly loft/roof void dwelling bats.

The roost potential in B1 – B6 is summarised thus.

B1 – roost potential 'moderate'	-	additional survey required.
B2 - roost potential 'negligible'	-	no additional survey required.
B3 - roost potential 'negligible'	-	no additional survey required.
B4 - roost potential 'negligible'	-	no additional survey required.
DC report represential (republic)		and a shall the second s

- B5 roost potential 'negligible'
- no additional survey required. B6 - roost potential 'negligible' - no additional survey required.

The three small trees surveyed have 'negligible' bat roost suitability and no additional survey is required.

3.1.4 Birds:

There was no evidence of breeding birds noted anywhere on the site.

Nesting opportunities occur in the garden trees and shrubs, and possibly in the hole in the soffit of B1.

Collectively the site is small and nesting habitat limited, therefore the site is only considered capable of supporting breeding bird populations not exceeding 'local' importance.

Wintering Birds:

The statutory sites with wintering bird designations are as follows.

- Ribble and Alt Estuaries (SSSI/SPA/Ramsar) is located 8.8km west of the site.
- Martin Mere (SSSI/SPA/Ramsar is located 6.9km north-east of the site.

The SSSI, SPA and Ramsar site designations relate wholly or in part to their wintering wildfowl populations.

The desk study confirms that the site is between 8.8km and 6.9km from any statutory site with wintering bird designations, therefore direct impacts on those sites are not predicted.

In addition, it can be confirmed that the site lies within the SWA for wintering PFG only.

However, the site survey conclusively shows that the site is totally unsuitable for wintering birds as it is composed of habitats and an environment never used by foraging pink-footed goose (PFG) and whooper swan.

The proposal involves the demolition of the house and ancillary buildings and construction of a new dwelling on the site.

The proposals are self-contained and affect pre-existing buildings and formally managed land within the domestic curtilage that is composed of amenity grassland and hardstanding.

The habitats have no value for wintering birds.

The field to the north is separated from the site by Gaw Hill Lane and is screened by a belt of trees. This field now forms part of Gorse Hill Nature Reserve and is no longer in arable production, therefore its value for wintering PFG diminishes considerably.

The land to the east of the site is small and enclosed by roads and residential land, and whilst it is arable it is considered too small and subject to visual human disturbance to sustain foraging PFG.

Conversely the land to the west is composed of a large open arable field that is 12ha (approx.) in extent, and could support foraging PFG. However, the presence of residential features on its eastern boundary will naturally make PFG stand off from that boundary, and the field is large enough to accommodate any temporary displacement generated during construction.

Assuming PFG utilise that field for foraging, the addition of a new property on the site is not predicted to measurably affect how PFG use that field in the long term.

Overall, impacts on wintering birds are considered to be no greater than 'negligible' and no direct or measurable indirect impact on the SPAs/SSSIs are predicted.

3.1.5 Badger:

No evidence of badger activity was found on-site during the survey, therefore the species is absent on site and no adverse impacts are predicted.

3.2 RECOMMENDATIONS:

The following section outlines any mitigation or precautions required in respect of the survey findings.

3.2.1 Vegetation/Habitats:

No significant vegetated habitats are affected by the proposals and no further surveys are recommended.

As the habitats affected are highly modified garden land, on-site biodiversity enhancements are considered sufficient to mitigate any losses generated by the proposal.

These include on-site native tree and shrub planting comprising a native boundary hedgerow.

Species suitable for planting and suggested component percentage include the following.

Hawthorn	Crataegus monogyna	90%
Hazel	Corylus avellana	3%
Guelder rose	Viburnum opulus	3%
Crab apple	Malus sylvestris	2%
Holly	llex aquifolium	2%

Blackthorn *Prunus spinosa* should not be planted due to its propensity to spread into adjacent land by means of suckers.

It is also recommended that three rowan trees (*Sorbus aucuparia*) are planted and allowed to grow to full height.

All trees must be fitted with suitable tree guards and staked.

3.2.2 Great Crested Newt:

No impacts on GCN or its habitat are predicted, and no further surveys, precautions or mitigation is recommended.

3.2.3 Bats:

The PRFs identified in B1 collectively relate to '**moderate**' bat roost suitability for both crevice dwelling and possibly loft/roof void dwelling bats.

No bat roost potential has been identified in B2 – B6 which have 'negligible' bat roost suitability

Therefore, in line with the recommendations provided in the BCT Good Practice Guidelines (2016), additional bat surveys are required in B1, and two separate dusk surveys are advised.

In regard to B2 – B6, these buildings have '**negligible**' roost suitability and no further surveys are required.

(See extract from BCT Guidelines Table 7.1).

Table 7.1 Recommended timings for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).							
Low roost suitability	Moderate roost suitability	High roost suitability					
May to August (structures) No further surveys required (trees)	May to September ^a with at least one of surveys between May and August ^b	May to September ^a with at least two of surveys between May and August ^ь					

^a September surveys are both weather- and location-dependent. Conditions may become more unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season.

^b Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more, unless there are specific ecological reasons for the surveys to be closer together (for example, a more accurate count of a maternity colony is required but it is likely that the colony will soon disperse). If there is potential for a maternity colony then consideration should be given to detectability. A survey on 31 August followed by a mid-September survey is unlikely to pick up a maternity colony. An ecologist should use their professional judgement to design the most appropriate survey regime.

It should be noted that these surveys cannot be subject to a planning condition due to the likelihood of the presence of a European protected species (i.e. bats) in the building affected, and the associated possibility of adverse effects on bat species and their roosts if present.

The surveys must be led/undertaken by a suitably experienced and licenced bat ecologists.

If bats are found, then the species and level/type of activity identified will guide the mitigation required to inform a Natural England licence application.

All mitigation and lighting issues will be advised upon following the findings of the bat activity surveys.

3.2.4 Birds:

Breeding Birds:

No nesting birds were found during the survey, however, to show a net gain it is recommended that two double chamber 'woodstone' (Vivara Pro) sparrow nest boxes are provided.

It is advised that the boxes are integrated into the brickwork on the east gable of the new house.

The boxes must be fixed at a minimum height of 3m where possible.

Wintering Birds:

The evaluation has concluded that the effects on wintering birds are no greater than 'negligible' and there is no direct or indirect impact on the SPAs/SSSIs.

However, ultimately, it is for the Competent Authority to decide whether or not the information provided in this report is sufficient for them to discharge their duty in respect of a Stage 1 HRA, and to confirm whether an Appropriate Assessment (Stage 2 HRA) is required.

A HRA can be undertaken by the Competent Authority, or alternatively the applicant can commission a suitably experienced ecologist to undertake a 'Shadow' HRA on their behalf.

3.2.5 Badger:

Badgers are absent on site and in the surrounding area and no further surveys or precautions recommended.

REFERENCES:

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

Bat Conservation Trust (BCT), (2018) Bats and artificial lighting in the UK: Bats and the Built Environment series. BCT.

Cutts, N., Hemingway, K. and Spencer, J. (2013) *The Waterbird Disturbance Mitigation Toolkit Informing Estuarine Planning & Construction Projects.* University of Hull.

DEFRA (2006) Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 – Habitats and Species of Principal Importance in England. DEFRA/Natural England

Donald, P.F, (2004) The Skylark. Poyser.

English Nature (2004) An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (Triturus cristatus). English Nature Research Report 576

English Nature (2004) Bat Mitigation Guidelines, English Nature.

English Nature, (2001) Great Crested Newt Mitigation Guidelines. English Nature.

Forshaw. W.D. Numbers, distribution and behaviour of Pink-footed Geese in Lancashire.

Gilbert G, Gibbons D.W. & Evans J. (1998) Bird Monitoring Methods. RSPB et al.

Lancashire County Planning Department, (1998) *Biological Heritage Sites. Guidelines for Selection.* Lancashire County Council

Langton, T., Beckett, C., & Foster, J. (2001) *Great Crested Newt Conservation Handbook.* Froglife.

Madsen J, Impact of Disturbance on Field Utilisation of Pink-footed Geese in West Jutland, Denmark. Biological Conservation 33 (1985) 53-63

Mitchell. C. and Hearn. R. *Pink-footed Goose Anser brachyrhynchus (Greenland/Iceland population) in Britain 1960/61 – 1999/2000* (Waterbird Review Series)

Nature Conservancy Council (1990) Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit. Nature Conservancy Council.

Pyefinch, R. & Golborn, P. (2001) *Atlas of the Breeding Birds of Lancashire and North Merseyside 1997-2000.* Lancashire Bird Club/Lancashire and Cheshire Fauna Society.

Roper, T. J, (2010) Badger. New Naturalist Library – Collins.

Shrubb, M. (2012) The Lapwing. Poyser.

APPENDIX:

Map 1: Phase 1 Habitat Survey Map

