



**EXTENDED PHASE 1 HABITAT SURVEY
& PROTECTED SPECIES SURVEY / ASSESSMENT**

- Land at: Oak Leigh, Whiteacre Lane, Barrow, Lancashire -

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A report for

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PART 1 INTRODUCTION:

1.1 REASONS FOR SURVEY:

PENNINE *Ecological* have been commissioned by Avalon Chartered Town Planning, to undertake an Extended Phase 1 Habitat Survey and protected species survey / assessment of Land at; Oak Leigh, Whiteacre Lane, Barrow, Lancashire.

The study includes a vegetation and badger survey, together with assessment for other potential protected species issues. The study also includes a desk top ecological data search with Lancashire County Council.

The report includes a full evaluation of the ecological significance of the survey findings.

The surveys are required due to proposals for site development.

1.2 SITE LOCATION:

The site is located approximately 1.5km north of Whalley on the southern edge of the village of Barrow. The sites central National Grid Reference is SD 736 378.

The locations of the habitats surveyed are shown on Map 1 Appendix 1.

1.3 SITE STATUS:

A desk top study was commissioned as part of the survey. This included searches for both statutory protected sites and non-statutory sites within 500m radii of the site survey boundary. The data request also includes records of protected species within 500m radii of the site. Lancashire Environment Record Network (LERN), were consulted to provide details of non-statutory sites and protected species records.

1.3.1 Statutory Sites:

Details of statutory sites were sought from the Natural England web site search:

<http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx>

There are no statutory wildlife sites with in 500m of the site.

1.3.2 Non-Statutory Sites:

There is one Biological Heritage Site (*BHS*) within 500m of the site boundary. This is;

Barrow Brook Field: Site Code 73NW17: Approximately 450m W at nearest point to site.

This site is a species-rich neutral grassland. The full site details are provided in Appendix 2.

1.3.3 Protected Species / Habitat Data:

N.b. Refer to Appendix 2 for full details of protected species records and other species.

The data search reveals no records that can be related directly to the site. There are eight Lancashire Key species records within 500m of the site, although all records are at distances between 250 - 500m from the site. The nearest record to the site at approximately 250m east is for pipistrelle bat species in 2009. Other more distant records are for the following species; grey heron, brown hare, moth species, Indian balsam, European eel, bluebell and common frog.

A full list of species within the search area is shown in Appendix 2.

1.4 SURVEY CONSTRAINTS:

The survey was conducted on 6th July which is an optimal time for Extended Phase 1 Habitat Survey.

There were no constraints to other protected species surveys / assessments and the site was fully accessible.

PART 2 SURVEY RESULTS:

2.1 EXTENDED PHASE 1 HABITAT SURVEY:

2.1.1 Extended Phase 1 Habitat Survey Methodology:

An Extended Phase 1 Habitat Survey (*Nature Conservancy Council 1990*) of the study area was undertaken 6th July 2015. The site's habitats were mapped and higher vascular plant species 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 these values can be prefixed by the letter L (locally) or V (very), to provide more subtle biogeographical data.

2.1.2 Habitats Present:

- A2.1 Dense scrub
- A2.2 Scattered scrub
- A3.1 Scattered broadleaved trees
- B2.2 Neutral semi-improved grassland
- B4 Improved grassland
- B6 Poor semi-improved grassland
- J2.1.1 Intact species-rich hedge
- J2.4 Fence
- J3.6 Building

2.1.3 General Description:

This relatively small site is approximately 65m by 38m in maximum dimensions, located to the south of an existing residential property and associated garden.

The site forms a rectangular shaped field which is cut but otherwise unmanaged. The field is linked to the residential property to the north via two openings in a beech hedge.

The sites western boundary with Whalley Road is a mature hedgerow with two mature trees, the hedge is wide in parts with colonising scrub / trees which extend partially into the site. The northern boundary is a beech hedgerow. The eastern boundary supports a beech hedge at the northern end and some silver birch and sapling trees to the south, otherwise the boundary is generally open and fenced.

The southern site boundary is fenced with a scattering of semi-mature native trees and scrub.

A small wooden garage / storage shed is present in the north east corner of the site.

2.1.4 Target Notes:

Target Note 1: Poor semi-improved grassland:

This habitat dominates the whole of the site and originates from improved pasture. The field is cut intermittently.

The following species were recorded, where species restricted to the margins only have been highlighted.

<u>Species:</u>	<u>Abundance:</u>
Yorkshire-fog	D
Creeping buttercup	A
Red fescue	LF
Common sorrel	O
Meadow-grass species	F
Timothy	O
Meadowsweet	R (<i>margins only</i>)
Hogweed	R (<i>margins only</i>)
Moss species	LA
White clover	LF
Ribwort plantain	VLF
Dandelion species	VLF
Common bird's-foot-trefoil	VLF (<i>one patch</i>)

Target Note 2: Scattered trees / scrub on southern boundary:

The southern site boundary is fenced with a scattering of semi-mature native trees and scrub. Species present include; rowan, sycamore, alder, field maple, silver birch, ash, horse chestnut, pedunculate oak and grey willow.

The ground flora includes; abundant wood dock and locally abundant common nettle and ivy. Wood avens and great willowherb are locally frequent. Species occasionally or rarely present include; non-native bluebell, bush vetch, creeping cinquefoil and meadowsweet.

Target Note 3: Intact species-rich hedgerow (western boundary):

The hedge on the sites western boundary runs alongside Whalley Road. Colonising scrub / trees extend from the hedge into the site, particularly in the middle/northern section. The following species were recorded;

Hedge (*woody species*):

<u>Species:</u>	<u>Abundance:</u>
Hawthorn	D
Elder	R

Target Note 3: Intact species-rich hedgerow (western boundary): Continued;

Hedge (woody species): continued;

<u>Species:</u>	<u>Abundance:</u>
Pedunculate oak	O/F
Horse chestnut	O
Ash	O
Blackthorn	LA

Hedge bottom species:

<u>Species:</u>	<u>Abundance:</u>
Bramble	LA
Common nettle	LA
Garlic mustard	LA
Dog's mercury	LF
Cow parsley	LF
Wood false-brome	LF
Cleavers	LF
Herb Robert	LF
Ivy	LF
Cock's-foot	O

Target Note 4: Mature pedunculate oak with potential bat roost:

This mature oak has locally dense ivy cover that potentially could support bat roosts although this is considered 'less than low' likelihood.

Target Note 5: Mature ash with potential bat roost:

This mature ash has a cavity hole on the main trunk that potentially could support a bat roost. This is considered 'low-medium' likelihood.

Target Note 6: Semi-improved neutral grassland:

A small area of semi-improved grassland is present in the north east corner of the site. This area is cut more frequently than other parts of the field and as a result has become more impoverished, allowing a higher herb content. Species composition is similar to the other parts of the field but with a higher abundance of the following additional species; self-heal (locally abundant), Mouse-ear hawkweed and ribwort plantain (locally frequent) and Autumn hawkbit which is occasional.

2.2 PROTECTED SPECIES SURVEYS:

During the Phase 1 Habitat Survey additional surveys were undertaken where appropriate for the presence of other potential protected species. The following surveys were undertaken.

2.2.1 Badger Survey:

Method:

A badger survey was undertaken of the site. The badger survey used standard techniques for establishing the use of the site by badger, and includes searches for evidence of badgers including:

- Setts
- Pathways
- Footprints
- Latrines
- Foraging areas
- Scratching posts
- Boundary searches for runs, pathways and latrines.

The survey results are outlined below.

Results:

Sett Search:

The survey found no setts on site.

Search for Foraging Signs and Pathways:

The site was thoroughly searched for badger pathways/signs of foraging. No sign of badger activity was found therefore it can be concluded that the species is not using this area for foraging or commuting.

Boundary Search:

All the boundaries of the site were walked/examined for potential runs, pathways and latrines. The search found no evidence to suggest badger activity along any of the site boundaries.

The absence of any activity signs indicates that badgers are not entering the site. The absence of latrines indicates a lack of territorial activity in the near vicinity of the site.

2.2.2 Bats:

During the survey an assessment of bat roost potential and foraging habitats was undertaken. One ash tree and one pedunculate oak have bat roost potential ranging from 'less than low' to 'low - moderate' as detailed under Target Notes 4 and 5.

The sites boundary hedgerows have value as bat foraging habitat.

2.2.3 Other Protected Species:

Issues in relation to other potential protected species where no specific survey was undertaken are assessed in the following section.

PART 3 ECOLOGICAL EVALUATION & RECOMMENDATIONS:

3.1 EVALUATION OF SURVEY & RECOMMENDATIONS:

The following section evaluates the site in relation to statutory/non-statutory sites, protected species and species/habitats listed on the former UK Biodiversity Action Plan Priority List, Section 41 Species/Habitats of Principal Importance in England (NERC) Act 2006, and the Lancashire Biodiversity Action Plan.

3.1.1 Statutory Sites:

There are no statutory wildlife sites associated with the site. There are no statutory sites within 500m of the site.

3.1.2 Biological Heritage Sites/non statutory designations:

The area affected by the proposed works fails to meet any of the guidelines for selection associated with the Lancashire Biological Heritage Site scheme.

There are no County Biological Heritage Sites (*BHS*) associated with the site.

3.1.3 Sites Habitats & Higher Plant Species:

The grassland habitats lost to development do not meet any guidelines for Lancashire BAP habitat status. The habitat (*poor semi-improved grassland*) and plant species recorded on site are common and widespread and are considered to be of local (*Parish*) value.

The hedgerow on the site western boundary is a Section 41 Habitats of Principal Importance in England (NERC) Act 2006. The hedgerow was also assessed in terms of qualifying as an 'Important Hedgerows' under the Hedgerow Regulations (1997).

The hedgerow qualifies as an 'important hedgerow' by just meeting the minimum criteria. The qualifying features were as follows;

Average woody species count: 4
Woodland ground flora: 3 species
2 or more standard trees.
Total gaps less than 10%
Parallel hedge within 15m

It is understood that a 5m section of hedge will be removed to provide a new access point off Whiteacre Lane. A further 7m of hedge either side will be reduced to 1m in height to achieve acceptable visibility splays.

The data search reveals no records that can definitely be related directly to the site.

Recommendations: Habitats & Higher Plant Species:

There are no requirements for further surveys.

However the applicant must make a Hedgerow Removal Notice application to the local authority before any works affecting the hedge start. The local authority must be consulted and will guide the applicant through the removal notice procedure.

The applicant must ensure that this loss is mitigated for elsewhere on site by planting of replacement hedge lengths and / or trees / native shrubs.

In our opinion the removal of this relatively small section of hedge in this location does not significantly reduce the functionality or ecological value associated with the hedgerow. These minor impacts are only of site significance and can be easily mitigated for on site, as shown on Avalon Town Planning 'Proposed Site Plan' HILL-S/01a – DWG 03.

3.1.4 Protected Species:

Badgers:

Badgers are protected under Schedule 6 of the Wildlife and Countryside Act 1981, and under the Protection of Badgers Act 1992, which prohibits deliberate interference with the animal or its sett.

The survey found no evidence of historic, recent or current use of the site by badgers for foraging, commuting or occupation and the species is considered to be absent.

Recommendations: Badgers:

There are no issues in relation to badgers arising from the development. No further surveys are required.

Bats:

Bats are comprehensively protected by European legislation.

Two trees on the western boundary have bat roost potential, but are understood not to be affected by the work directly.

The site is considered to have some value as bat foraging habitat.

Recommendations: Bats:

It is understood that the ash and oak trees are unaffected by the works. However should this not be the case then more detailed bat roost inspections of these trees will be required.

Boundary buffer zones around the whole site perimeter but particularly the western boundary hedge should be maximised/enhanced to ensure potential foraging routes are maintained. In all cases illumination of boundary features (*hedgerows and semi-mature trees must be*

avoided). Where lighting is required this must be low level, directed downwards and of low intensity.

Great Crested Newt:

Great crested newt is comprehensively protected under European legislation.

There are no waterbodies on the site, or within the terrestrial range of the species.

Recommendations: Great Crested Newt;

There are no requirements for further survey and the species is considered absent from the site, beyond reasonable doubt.

Birds:

All breeding birds (*with only minor exceptions*) are protected under the Wildlife and Countryside Act (1981) as amended.

The boundary hedgerows and trees have potential to support breeding birds.

Recommendations: Birds;

No strategic bird surveys are required. However before any development and in order to minimize impacts on birds any site disturbance including removal of trees / hedgerow sections should take place outside of the breeding season, i.e. between the end of August and end of February. Following the felling of trees/scrub etc, piles of brash should be removed from the site, failure to do so could provide potential nest sites if left in situ until the following breeding season.

If removal of woody vegetation is envisaged during the breeding season, then checks should be made to establish any nesting or breeding activity, prior to removal.

PART 4 REFERENCES:

4.1 REFERENCES:

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

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

Rose, F. (1981) *The Wildflower Key*. Warne.

Stace, C., (1997) *New Flora of the British Isles (Second edition)*. Cambridge University Press.

Web Sites:

Google Earth.

Lancashire Biodiversity Partnership website.

MARIO.

Natural England – Nature on the Map.

APPENDIX 1:

Map 1: Extended Phase 1 Habitat Survey

Site Photographs

Site Photographs: July 6th 2015



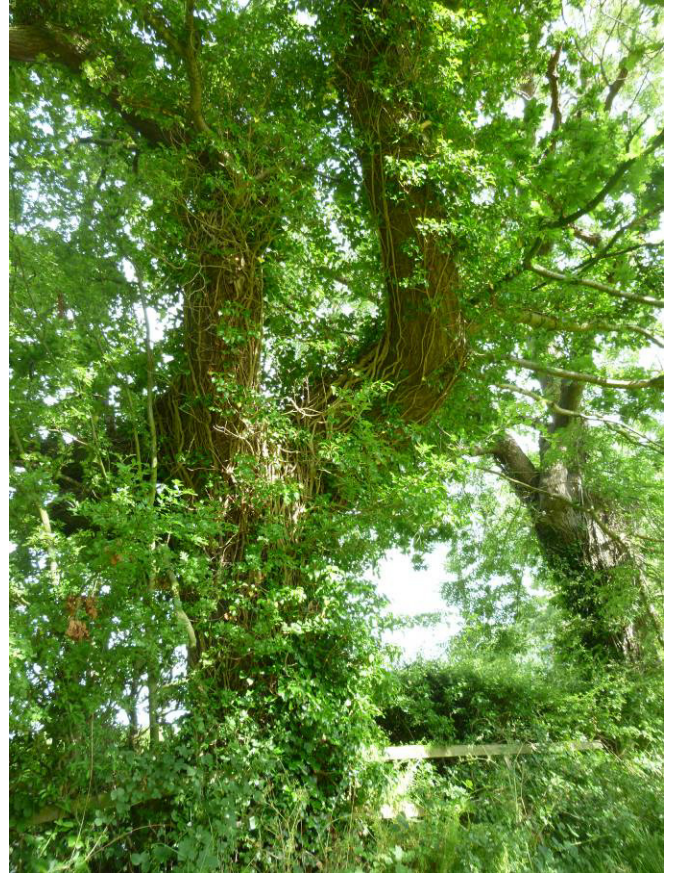
Species-rich hedge with mature trees on western site boundary.



Scattered trees / scrub on southern site boundary.



Looking north from the southern boundary.



Mature oak on western site boundary with 'less than low' bat roost potential, associated with ivy cover on main trunk.



Small area of semi-improved grassland in NE corner of site.



Mature ash on western site boundary with 'low - moderate' bat roost potential, cavity hole on main trunk.

APPENDIX 2:

Desk Top Study

(Note data in separate file)