



320130169P

Ecological Survey Report – Rev01

Whalley Road, Barrow

Project No. 854499

AUGUST 2012

RSK



RSK GENERAL NOTES

Project No.: 854499

Title: Ecological Survey Report – Whalley Road, Barrow

Client: Bowsall Ltd

Date: August 2012

Office: Helsby

Status: Final

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23/08/12

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11/07/12

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1 EXECUTIVE SUMMARY

1. This report presents the results of ecological surveys carried out at land off Whalley Road, Barrow, Clitheroe (OS Grid Reference SD 735 375). The survey was carried out on 28th June 2012 by Will Holden of RSK, and comprised a Phase 1 Habitat Survey and an assessment of the habitat for protected vertebrates.
2. The site comprises an old petrol station with an area of bare ground and rough grassland to the rear, bordered by hedgerows. The site is bordered on the north by industrial warehouses, to the east by agricultural grassland, to the south by a nursery and agricultural land and to the west by Whalley Road and small commercial properties beyond.
3. Taking into consideration the geographical region and the habitat types, protected animals that could be encountered are:
 - Badger;
 - bats;
 - nesting birds; and
 - common reptiles.
4. The site is located in a relatively green area to the south west of Clitheroe, where green space extends to the north, south and west of the site. The site does not have any 'ancient habitats' (in the sense of Rackham, 1980), and the habitats on the site are generally common in the wider landscape.
5. There are patches of *Lamium galeobdolon ssp. argentatum* (Variegated Yellow Archangel) under the hedgerow at *Target Note 3*. This species is listed on *Schedule 9 of The Wildlife and Countryside Act 1981* (as amended). It is illegal to cause this species to grow in the wild and practical steps should be taken to ensure that it is not spread, such as killing plants *in-situ* before moving any soil where it is growing.
6. The survey was sufficient to conclude that there are no Badger setts on the site. Should work not commence within the next 6 months, as Badgers are a highly mobile species, a repeat survey should be conducted to confirm the findings of this survey.
7. The trees in the hedgerow along the southern boundary of the site (*Target Note 5 and 6*) and the building on site (*Target Note 8*) have some suitability for roosting bats. If these trees and building are due for removal, a ground level tree inspection and internal/external building inspection must be conducted in order to assess the roost potential.
8. To ensure compliance with legislation protecting nesting birds, removal of vegetation that might be used by nesting birds should only be carried out outside the nesting season (March to August inclusive). If this is not possible, then the vegetation should be checked for nests immediately prior to removal.



9. Although the habitats on the site are suitable foraging and basking habitat for reptiles, they are small in area and as no records were returned for the local area, no further surveys are required.

2 INTRODUCTION

2.1 Purpose of this Report

This report presents the results of ecological surveys carried out at land off Whalley Road, Barrow, Clitheroe (OS Grid Reference SD 735 375). The survey was carried out on 28th June 2012 by Will Holden of RSK, and comprised a Phase 1 Habitat Survey and an assessment of the habitat for protected vertebrates. The site location is shown in *Figure 1*.

2.2 Ecological Context

The site comprises an old petrol station with an area of bare ground and rough grassland to the rear, bordered by hedgerows. The site is bordered on the north by industrial warehouses, to the east by agricultural grassland, to the south by a nursery and agricultural land and to the west by Whalley Road and small commercial properties beyond. The surrounding landscape is primarily composed of agricultural grassland and field boundaries formed by hedgerows. The residential and small commercial properties within Barrow are located approximately 0.5 km north of the site with Clitheroe located 3.25 km north.

2.3 Structure of this Report

The remainder of the report is structured as follows:

- Section 3 describes the survey methods;
- Section 4 contains the results;
- Section 5 details the ecological evaluation and recommendations for the site; and
- Section 6 lists the documents referred to in this report.

3 METHODS

3.1 Background Data Search

Background sources were consulted for records of statutory and non-statutory designated sites and protected and notable species within 2 km of the site boundary. The sources contacted were:

- Lancashire Ecological Records Network; and
- Multi-Agency Geographic Information for the Countryside (MAGiC).

3.2 Phase 1 Habitat Survey

Will Holden of RSK undertook the Phase 1 Habitat Survey on the 28th June 2012. Phase 1 Habitat Survey is the most widely-used UK methodology for cataloguing and mapping wildlife habitat resources over extensive areas. All habitats in the survey area were mapped using standard colour codes. Target Notes describe habitats and ecological features of interest. The methodology for this survey follows guidance given in the *Handbook for Phase 1 Habitat Survey: A technique for environmental audit* (JNCC, 2003).

3.3 Habitat Assessment for Protected Species

3.3.1 General

The site was assessed for its suitability for protected vertebrates. Obvious signs and incidental sightings of protected species would have been noted if found, although a single visit cannot usually confirm a species' presence or absence. Details of the survey methodology for each species are given below.

Taking into consideration the geographical region and the habitat types, protected animals that could be encountered are:

- Badger;
- bats;
- nesting birds; and
- common reptiles.

Other species listed on the UK or Lancashire Biodiversity Action Plan were also considered. A summary of the legal protection of the relevant animals is provided in Appendix B. Details of survey methods for each species are given below.

3.3.2 Badger

A detailed survey was carried out of the site and all suitable areas within 30 m of the site boundary for signs of Badger (*Meles meles*) activity including setts, foraging signs, paths (runs) and latrines. The entire survey area was assessed to identify areas that might be used by Badgers for sett building or foraging, and incidental signs of Badger including setts, foraging signs, paths (runs) and latrines were noted.

3.3.3 Bats

Habitats were assessed for their suitability for roosting, foraging and commuting bats. Suitable trees were assessed for their potential to support roosting bats. Features suitable for roosting bats in trees can include suitable cracks, splits and fissures. Areas of particular interest for foraging and commuting vary between species, but generally include sheltered areas and those habitats with good numbers of insects, such as woodland, scrub, hedges, watercourses, ponds, lakes and more species-rich or rough grassland.

3.3.4 Nesting Birds

Habitat that might be used by nesting birds was identified. Habitat was searched for evidence of bird nests, although surveys cannot conclusively establish which birds nest here.

3.3.5 Reptiles

The site was assessed for reptiles, with particular attention paid to those features that provide suitable basking areas (e.g. south-facing slopes), hibernation sites (e.g. banks, walls, piles of rotting vegetation) and opportunities for foraging (rough grassland and scrub). Sightings of reptiles would have been recorded if encountered.

The site was assessed for its suitability for each of the four common reptile species. Specific habitat requirements differ between species. Common Lizards (*Zootoca vivipara*) use a variety of habitats from woodland glades to walls and pastures, although one of their favoured habitats is rough grassland. Slow-worms (*Anguis fragilis*) use similar habitats to Common Lizards, and are often found in rank grassland, gardens and derelict land. Grass Snakes (*Natrix natrix*) have broadly similar requirements to Common Lizards with a greater reliance on ponds and wetlands, where they prey on Common Frogs (*Rana temporaria*). Adders (*Vipera berus*) use a range of fairly open habitats with some cover, but are most often found in dry heath (Beebee & Griffiths 2000).

3.4 Survey Constraints

This data is relevant for a maximum of 12 months. If more than one year elapses prior to commencement of the development it may be advisable to conduct a further ecology survey to ensure up-to-date information.

4 RESULTS

4.1 Background Data Search

4.1.1 Designated Sites

There are two statutory designated sites within the 2 km search area. Light Clough Site of Special Scientific Interest (SSSI) is located approximately 1,500 m east of the site and the Forest of Bowland Area of Outstanding Natural Beauty (AONB) is located approximately 1,600 m east of the site.

There are ten non-statutory designated sites within the 2km search area. The closest non-statutory designated site is Barrow Brook Field Biological Heritage Site (BHS) located approximately 0.6km north-west of the site.

All statutory and non statutory designated sites are too far from the development site to be impacted by the proposed development.

4.1.2 Noteworthy Species Records

No records of protected species were returned for the site.

Records for Great Crested Newt, Soprano Pipistrelle, Badger and Water Vole were returned within 2km of the site, however, no records are within 500m of the site.

4.2 Habitat Types

4.2.1 Overview

The site comprises predominantly bare ground and rough grassland with a single building. The survey area (termed 'the site' throughout this report) includes all areas within the red line boundary (see *Figure 1*) and within a 30 m buffer of the red line boundary. The site contains the following habitat types:

- rough grassland; and
- hedgerows and trees.

4.2.2 Rough Grassland

The central area of the site, particularly bordering the bare ground and waste ground to the east of the building, are dominated by rough grassland with a short (approximately 10 cm), open sward dominated by *Agrostis stolonifera* (Creeping Bent), *Arrhenatherum elatius* (False Oat-grass), *Elytrigia repens* (Common Couch) and *Holcus lanatus* (Yorkshire-fog) with scattered *Dactylis glomerata* (Cock's-foot). Broad-leaved herbs and semi-ruderal species are present including *Barbarea vulgaris* (Winter-cress), *Epilobium hirsutum* (Great Willowherb), *Geranium robertianum* (Herb-Robert), *Lathyrus*

pratensis (Meadow Vetchling), *Leucanthemum vulgare* (Oxeye Daisy), *Sonchus asper* (Prickly Sow-thistle), *Tussilago farfara* (Colt's-foot) and *Urtica dioica* (Common Nettle).

The western side of the site is predominantly tall, dense semi-ruderal, scrub and rough grassland vegetation dominated by *Arrhenatherum elatius* (False Oat-grass), *Epilobium hirsutum* (Great Willowherb), *Rubus fruticosus* agg. (Bramble) and *Urtica dioica* (Common Nettle). Also present are scattered *Alopecurus pratensis* (Meadow Foxtail), *Calystegia sepium* (Hedge Bindweed), *Cirsium palustre* (Marsh Thistle), *Dactylis glomerata* (Cock's-foot), *Elytrigia repens* (Common Couch), *Epilobium* sp (Willowherb), *Galium aparine* (Cleavers), *Heracleum sphondylium* (Hogweed), *Phalaris arundinacea* (Reed Canary-grass), *Ranunculus repens* (Creeping Buttercup), *Rumex acetosa* (Common Sorrel), *Rumex obtusifolius* (Broad-leaved Dock), *Senecio jacobaea* (Common Ragwort) and *Sonchus asper* (Prickly Sow-thistle).

4.2.3 Hedgerows and Trees

The boundary of the site comprises a hedgerow with mature *Crataegus monogyna* (Hawthorn) and *Sambucus nigra* (Elder). Scattered throughout are mature trees, primarily *Fraxinus excelsior* (Ash) and *Quercus robur* (Pedunculate Oak). The ground-layer is dominated by rough grassland and semi-ruderal species including *Alliaria petiolata* (Garlic Mustard), *Arrhenatherum elatius* (False Oat-grass), *Epilobium hirsutum* (Great Willowherb), *Equisetum arvense* (Field Horsetail), *Geum urbanum* (Wood Avens), *Lamiastrum galeobdolon* ssp *argentatum* (Variegated Yellow Archangel), *Mercurialis perennis* (Dog's Mercury) and *Urtica dioica* (Common Nettle). The hedgerow along the south side of the site is more diverse and species rich than the others on site.

There is an ornamental hedgerow at Target Note 7 that consists entirely of *Cupressocyparis leylandii* (Leyland Cypress) with a ground layer of *Cotoneaster* species (Cotoneaster), *Elytrigia repens* (Common Couch), *Festuca rubra* (Red Fescue) and *Holcus lanatus* (Yorkshire-fog) with scattered *Alliaria petiolata* (Garlic Mustard), *Arrhenatherum elatius* (False Oat-grass), *Galium aparine* (Cleavers), *Sedum acre* (Biting Stonecrop) and *Sedum rupestre* (Reflexed Stonecrop).

The trees in the hedgerows around the site are predominantly *Fraxinus excelsior* (Ash) with *Quercus robur* (Pedunculate Oak) present in places. The trees include mature specimens between 10m and 20m tall with varying degrees of Ivy claddings and some cracks, splits and broken branches present on the more mature specimens.

4.3 Habitat Assessment for Protected Species

4.3.1 Badgers

There is little suitable foraging habitat on site and no areas suitable for sett building. The habitats within 30 m of the site are more suitable for Badger foraging and sett building, however, no evidence of Badger was recorded. The survey is sufficient to conclude that Badgers are not using the site.

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4.3.2 Bats

Some of the trees in the hedgerow on the southern boundary of the site have cracks, splits and are covered in Ivy (*Target Notes 5 and 6*). These are potential bat roosting features. In addition, the building (*Target Note 8*), although flat roofed, has some features, including gaps under weather board and a hole in the cavity wall at the south eastern corner, that are suitable for roosting bats. The hedgerows and grasslands provide suitable bat foraging and commuting habitat.

4.3.3 Nesting Birds

The hedgerows and areas of grassland provide habitat suitable for nesting birds.

4.3.4 Common Reptiles

The rough grassland at *Target Note 2* is suitable for foraging and basking reptiles. The hedgerows offer suitable refuges, for sheltering and hibernation.

5 EVALUATION AND CONCLUSIONS

5.1 Botanical

5.1.1 Overall Value

Based on a brief review of aerial photography, the site is located in a relatively green area to the south west of Clitheroe, where green space extends to the north, south and west of the site. The site does not have any 'ancient habitats' (in the sense of Rackham, 1980), and the habitats on the site are generally common in the wider landscape.

5.1.2 Rough Grassland

The rough grassland is not particularly species-rich and is a common habitat within the local area. It is of site-level ecological value and no further botanical surveys are required.

5.1.3 Hedgerows

The hedgerows around the boundary of the site are generally species poor and require no further botanical survey.

5.1.4 Plant Species

There are patches of *Lamium galeobdolon* ssp *argenteum* (Variegated Yellow Archangel) under the hedgerow at *Target Note 3*. This species is listed on *Schedule 9* of *The Wildlife and Countryside Act 1981* (as amended). It is illegal to cause this species to spread into the wild. This species is highly invasive when it becomes established, but is not as easily spread as other invasive species such as *Fallopia japonica* (Japanese Knotweed). It is most likely to be spread if underground parts are transported in soil, but new plants are unlikely to grow from fragments of above-ground parts. Practical steps to prevent its spread could include killing the plants *in-situ* with a herbicide such as Glyphosate before moving any soil where this plant is growing.

5.2 Protected Vertebrates

5.2.1 Badgers

The survey was sufficient to conclude that there are no Badger setts on the site. Should work not commence within the next 6 months, as Badgers are a highly mobile species, a repeat survey should be conducted to confirm the findings of this survey.

5.2.2 Bats

The trees in the hedgerow along the southern boundary of the site (*Target Note 5 and 6*) and the building on site (*Target Note 8*) have some suitability for roosting bats. It is recommended that if these trees and building are due for removal, a ground level tree

inspection and internal/external building inspection should be conducted in order to assess the roost potential.

5.2.3 Birds

To ensure compliance with legislation protecting nesting birds, removal of vegetation that might be used by nesting birds should only be carried out outside the nesting season (which is March to August inclusive). If this is not possible, then the vegetation should be checked for nests immediately prior to removal.

If nests are found, they must be retained until the young have fledged. If these simple measures are implemented, then there will be no impacts on nesting birds.

5.2.4 Common Reptiles

Although the hedgerows and rough grassland at *Target Note 2* are suitable foraging and basking habitat for reptiles, they are small in area and as no records were returned for the local area, no further surveys are required.

6 REFERENCES

Joint Nature Conservation Committee (2003). *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit* (revised reprint). Joint Nature Conservation Committee, Peterborough.

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APPENDIX A: FIGURES

Figure 1 – Phase 1 survey map.

APPENDIX B LEGISLATION

Badgers

Meles meles (Badger) is protected in Britain under the Protection of Badgers Act 1992 and Schedule 6 of the Wildlife and Countryside Act 1981 (as amended).

The legislation affords protection to Badgers and Badger setts, and makes it a criminal offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a Badger sett; or
- to disturb a Badger when it is occupying a sett.

Bats

All species of British bat are protected by *The Wildlife and Countryside Act 1981* (as amended) extended by the *Countryside and Rights of Way Act 2000*. This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat whilst it occupies a bat roost.

Bats are also European Protected Species listed on *The Conservation of Habitats and Species Regulations 2010*. This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats, including in particular any disturbance which is likely (a) to impair their ability - (i) to survive, to breed or reproduce, or to rear or nurture their young; or (ii) hibernate or migrate, where relevant; or (b) to affect significantly the local distribution or abundance of the species to which they belong.
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present.

Birds

Birds general protection

All species of bird are protected under *Section 1* of the *Wildlife and Countryside Act 1981* (as amended). The protection was extended by the CRow Act.

The legislation makes it an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

Birds (specially protected species)

Certain species of bird are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981* (as amended) and receive protection under *Sections 1(4) and 1(5)* of the Act. The protection was extended by the CRow Act. The legislation confers special penalties where the above mentioned offences are committed for any such bird and also make it an offence to intentionally or recklessly:

- disturb any such bird, whilst building its nest or it is in or near a nest containing dependant young; or
- disturb the dependant young of such a bird.

Common Reptiles

Lacerta vivipara (Common Lizard), *Natrix natrix* (Grass Snake), *Anguis fragilis* (Slow-worm), and *Vipera berus* (Adder) are listed under *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the CRow Act.

Under the above legislation it is an offence to:

- intentionally or deliberately kill or injure any individual of such a species; or
- sell or attempt to sell any part of the species alive or dead.

APPENDIX C TARGET NOTES

Target Note 1. Rough grassland with a short open sward dominated by *Arrhenatherum elatius* (False Oat-grass) and *Elytrigia repens* (Common Couch) with scattered *Dactylis glomerata* (Cock's-foot) and *Holcus lanatus* (Yorkshire-fog). Broad-leaved herbs, tree seedlings and semi-ruderal species are present including *Cerastium fontanum* (Common Mouse-ear), *Cirsium vulgare* (Spear Thistle), *Crataegus monogyna* (Hawthorn), *Epilobium hirsutum* (Great Willowherb), *Equisetum arvense* (Field Horsetail), *Fraxinus excelsior* (Ash), *Galium aparine* (Cleavers), *Geranium dissectum* (Cut-leaved Crane's-bill), *Geranium lucidum* (Shining Crane's-bill), *Geranium robertianum* (Herb-Robert), *Heracleum sphondylium* (Hogweed), *Juncus effusus* (Soft-rush), *Leucanthemum vulgare* (Oxeye Daisy), *Mercurialis perennis* (Dog's Mercury), *Plantago lanceolata* (Ribwort Plantain), *Potentilla anserina* (Silverweed), *Potentilla reptans* (Creeping Cinquefoil), *Quercus robur* (Pedunculate Oak), *Ranunculus repens* (Creeping Buttercup), *Rubus fruticosus* agg. (Bramble), *Rumex obtusifolius* (Broad-leaved Dock), *Salix caprea* (Goat Willow), *Senecio jacobaea* (Common Ragwort), *Sonchus asper* (Prickly Sow-thistle), *Stachys sylvatica* (Hedge Woundwort), *Taraxacum* sect. *Ruderalia* (Common Dandelion), *Trifolium pratense* (Red Clover), *Trifolium repens* (White Clover), *Tussilago farfara* (Colt's-foot) and *Urtica dioica* (Common Nettle)

Target Note 2. Rough grassland similar to *Target Note 1*, with *Agrostis stolonifera* (Creeping Bent), *Elytrigia repens* (Common Couch) and *Holcus lanatus* (Yorkshire-fog). Semi-ruderal species dominate with scattered broad-leaved herbs and tree seedlings including *Alliaria petiolata* (Garlic Mustard), *Barbarea vulgaris* (Winter-cress), *Calystegia sepium* (Hedge Bindweed), *Chamerion angustifolium* (Rosebay Willowherb), *Cirsium arvense* (Creeping Thistle), *Cirsium palustre* (Marsh Thistle), *Epilobium hirsutum* (Great Willowherb), *Equisetum arvense* (Field Horsetail), *Fraxinus excelsior* (Ash), *Geranium dissectum* (Cut-leaved Crane's-bill), *Geranium robertianum* (Herb-Robert), *Lathyrus pratensis* (Meadow Vetchling), *Medicago lupulina* (Black Medick), *Myosotis* species (Forget-me-not), *Plantago lanceolata* (Ribwort Plantain), *Plantago major* (Greater Plantain), *Ranunculus repens* (Creeping Buttercup), *Rosa canina* (Dog-rose), *Rubus fruticosus* agg. (Bramble), *Rumex obtusifolius* (Broad-leaved Dock), *Senecio jacobaea* (Common Ragwort), *Solanum dulcamara* (Bittersweet), *Sonchus asper* (Prickly Sow-thistle), *Trifolium pratense* (Red Clover), *Tussilago farfara* (Colt's-foot) and *Urtica dioica* (Common Nettle).

Target Note 3. Species poor hedgerow dominated by *Crataegus monogyna* (Hawthorn) and *Sambucus nigra* (Elder). Approximately 4m high. Ground layer is dominated by semi-ruderal and rough grassland species including *Alliaria petiolata* (Garlic Mustard), *Calystegia sepium* (Hedge Bindweed), *Epilobium hirsutum* (Great Willowherb), *Lamium galeobdolon* ssp. *argentatum* (Variegated Yellow Archangel) and *Urtica dioica* (Common Nettle).

Target Note 4. More species rich hedgerow with several mature trees. Dominated by *Crataegus monogyna* (Hawthorn) with scattered *Corylus avellana* (Hazel), *Hedera helix* (Ivy), *Prunus spinosa* (Blackthorn), *Rosa canina* (Dog-rose) and *Sambucus nigra* (Elder). Trees present include *Fraxinus excelsior* (Ash) and *Quercus robur* (Pedunculate Oak) up to 15m tall. The ground layer is dominated by rough grassland and semi-ruderal species including *Alliaria petiolata* (Garlic Mustard), *Arrhenatherum elatius* (False Oat-grass), *Epilobium hirsutum* (Great Willowherb), *Equisetum arvense* (Field Horsetail), *Geum urbanum* (Wood Avens), *Mercurialis perennis* (Dog's Mercury) and *Urtica dioica* (Common Nettle). A dry ditch runs along the base of the hedgerow. It has no bankside or aquatic vegetation.

Target Note 5. Mature, part dead *Quercus robur* (Pedunculate Oak) with rot holes suitable for roosting bats.

Target Note 6. Mature *Fraxinus excelsior* (Ash) with woodpecker holes and rot holes suitable for roosting bats..

Target Note 7. Dense *xCupressocyparis leylandii* (Leyland Cypress) hedgerow approximately 2m wide and 3.5m tall. Ground layer includes *Alliaria petiolata* (Garlic Mustard), *Arrhenatherum elatius* (False Oat-grass), *Bellis perennis* (Daisy), *Cotoneaster* species (Cotoneaster), *Elytrigia repens* (Common Couch), *Equisetum arvense* (Field Horsetail), *Festuca rubra* (Red Fescue), *Fraxinus excelsior* (Ash), *Galium aparine* (Cleavers), *Geranium robertianum* (Herb-Robert), *Holcus lanatus* (Yorkshire-fog), *Leucanthemum vulgare* (Oxeye Daisy), *Medicago lupulina* (Black Medick), *Sedum acre* (Biting Stonecrop), *Sedum rupestre* (Reflexed Stonecrop), *Sonchus asper* (Prickly Sow-thistle), *Taraxacum* sect. *Ruderalia* (Common Dandelion), *Trifolium repens* (White Clover), *Urtica dioica* (Common Nettle), *Vicia cracca* (Tufted Vetch), *Vicia sativa* (Common Vetch).

Target Note 8. Garage with a flat, felt roof. Unable to inspect inside however there is a hole in the exterior wall (revealing cavity wall) and gaps under a wooden fascia board on the south eastern corner of the building. Has some bat potential.

Target Note 9. Tall, dense semi-ruderal, scrub and rough grassland vegetation dominated by *Arrhenatherum elatius* (False Oat-grass), *Epilobium hirsutum* (Great Willowherb), *Rubus fruticosus* agg. (Bramble) and *Urtica dioica* (Common Nettle). Also present are scattered *Alopecurus pratensis* (Meadow Foxtail), *Calystegia sepium* (Hedge Bindweed), *Cirsium palustre* (Marsh Thistle), *Dactylis glomerata* (Cock's-foot), *Elytrigia repens* (Common Couch), *Epilobium* sp (Willowherb), *Galium aparine* (Cleavers), *Heracleum sphondylium* (Hogweed), *Phalaris arundinacea* (Reed Canary-grass), *Ranunculus repens* (Creeping Buttercup), *Rumex acetosa* (Common Sorrel), *Rumex obtusifolius* (Broad-leaved Dock), *Senecio jacobaea* (Common Ragwort) and *Sonchus asper* (Prickly Sow-thistle).

Target Note 10. Small area of *Salix caprea* (Goat Willow) woodland with an understorey of rough grassland similar to that found at *Target Note 9*.

Target Note 11. Raised bund approximately 4m high with vegetation similar to that found at *Target Note 9*.

Target Note 12. Tall, leggy, uncut hedgerow similar to that found at *Target Note 4*. A dry ditch runs along the base. Dominated by *Crataegus monogyna* (Hawthorn) with scattered *Quercus robur* (Pedunculate Oak), *Rosa canina* (Dog-rose) and *Sambucus nigra* (Elder).

Target Note 13. Semi-mature *Quercus robur* (Pedunculate Oak), which appears to be in good condition with no suitability for bats.



