# THE PARISH OF CATON-WITH-LITTLEDALE

# PRELIMINARY ECOLOGICAL ASSESSMENTS OF POTENTIALLY ALLOCATED SITES

**DRAFT COPY** 

**MARCH 2018** 





## THE PARISH OF CATON-WITH -LITTLEDALE

#### PRELIMINARY ECOLOGICAL ASSESSMENT

**MARCH 2018** 

**Prepared By** 

The Greater Manchester Ecology Unit Clarence Arcade Stamford Street Ashton-under-Lyne Manchester OL6 7PT

Tel - 0161 342 2250

For

**Caton-with-Littledale Parish Council** 

#### 1 Introduction

As part of an overall ecological appraisal of the Caton-with-Littledale Neighbourhood Plan the Greater Manchester Ecology Unit was commissioned by the Parish Council to undertake preliminary ecological assessments of a number of sites being considered for potential allocation as part of the Plan.

This is the report of the site surveys and assessments.



Fig 1 Location and boundaries of the sites surveyed, showing the site numbers/name as referenced in the Plan and in this report

#### 2 Methodology

#### 2.1 Surveys comprised –

- Local Record Centre Data search (Desk-top) from Lancashire Local Record Centre (LERN)
- Preliminary Ecological Appraisal, comprising a walkover survey of each site

Preliminary ecological appraisals have a range of purposes; one key use which applies to these surveys is in the site development process to gather data on existing conditions, often with the intention of conducting a preliminary assessment of likely impacts of development schemes or establishing the baseline for future monitoring. As a precursor to a proposed project, some evaluation is usually made within these appraisals of the ecological features present, as well as scoping for notable species or habitats, identification of potential constraints to proposed development schemes and recommendations for mitigation.

Field surveys were undertaken in early February 2018 in wet weather conditions. No specific species surveys were undertaken during the field surveys but incidental species records were taken.

#### 3 Limitations of the Assessment

The assessment was carried out in February, which is outside the optimum time to conduct such an assessment. However, given the nature of the sites we are satisfied that the results would not be significantly different if they were undertaken at the optimal time of year.

Full access was not possible at all of the sites and the assessment had to be made from adjacent roads and paths, using close focusing binoculars.

#### 4 GMEU Personnel

The Ecological Appraisal was undertaken by Mandy Elford BSc (Hons), CMIEEM, Ecologist with GMEU and a Natural England Class 2 Bat License holder. Mandy Elford is an experienced ecologist with significant experience in ecological site assessment and development projects. She has worked as a professional ecologist for the past 14 years.

#### 5 Protected and Notable Species

There are many species and habitats in the UK which are specially protected by law; these include so-called priority habitats and species. These habitats and species are generally given greater weight in spatial planning processes and in development management decisions. The presence of protected and priority habitats and species on a site can represent a significant constraint on the future development of the site.

The protected and priority habitats and species most relevant to this assessment are:

#### **Bats**

Bats have been recorded commuting and feeding in the assessment area. Bat Roosts also occur in the locality. All species of bat and their roosts are protected under the terms of the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010 (as amended) which implements EC Directive 92/43/EEC, the Habitats Directive.

It is a criminal offence to:

- Intentionally or deliberately kill, injure, catch or keep bats
- Damage, destroy or obstruct access to bat roosts
- Disturb bats, for example by entering known roosts
- Sell, barter or exchange bats, alive or dead

The implication is that any works planned for many of the sites assessed must accommodate the requirements of bats and must also avoid all the offences as listed above.

#### **Nesting Birds**

All nesting birds their eggs and young are specially protected under the terms of the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally take damage or destroy the nest of any wild bird while it is in use or being built. A number of the sites assessed supported habitat suitable for use by nesting birds.

#### **Hedgerows**

Hedgerows are a UK Biodiversity Priority Habitat. Hedgerows are important for invertebrates, birds, amphibians, bats and small mammals for food, cover, nesting and species movement. Hedgerows on sites assessed should be retained wherever possible, enhanced and protected from development.

# Invasive Species – Schedule 9 of the Wildlife & Countryside Act 1981 (as amended)

Certain species of plants and animals that do not naturally occur in Great Britain have become established in the wild and represent a threat to the natural flora and fauna. The spread of these 'invasive species' in the wild is proscribed by statute.

The invasive plants Japanese knotweed, variegated yellow archangel and a

species of cotoneaster were recorded on some of the sites assessed.

Himalayan balsam and Giant hogweed were also recoded on some sites, associated with the water courses.

#### 6 Results

#### SITE DESCRIPTIONS

#### 6.1 SITE 37

Site 37 is a small area dominated by close-mown 'amenity' grassland with relatively low ecological value, on the western edge of the Brookhouse catchment.

A building is present on the site, a former scout hut. The building is a single storey part brick part wooden clad building with a pitched roof covered in bitumen roofing felt. The windows are covered in security mesh.

The boundaries of the site have more ecological interest. A small cemetery, an area of hard standing and a single storey building forms the sites northern boundary. Kirk Beck Brook with a number of mature and semi mature trees opening out onto open countryside forms its eastern boundary. An area of scrub and trees opening out onto school playing fields are to the south of the site and to the west are houses and gardens. The trees comprise sycamore, ash, oak, birch and holly. There is a beech hedge along the edge of the cemetery. The invasive variegated yellow archangel was recorded on the western edge of the site.

Trees recorded on site include sycamore, ash, oak, birch and holly. A rabbit was recorded during the site visit together with blackbird and robin.

Common and Soprano Pipistrelle bats are recorded in the locality and the mature trees and the brook have the potential to support foraging and commuting bats. None of the trees on site appeared to have features to support roosting bats, but a full inspection of the trees was not possible. The trees and hedge have the potential to support nesting birds.



Photo 1 - former scout hut, site 37



Photo 2 Amenity grassland with line of trees along the brook, site 37



Photo 3 Kirk Beck Brook, site 37



Photo 4 The invasive Variegated Yellow Archangel, site 37

Further Surveys Recommended	<ul><li>Nesting birds</li><li>Bat survey (trees/building)</li></ul>
Recommendations:	The invasive Variegated yellow archangel is present on the site. This species is listed on Schedule 9 of the Wildlife and Countryside Act and it is an offence to allow this plant to grow in the wild. We would recommend that this species be removed from the site and disposed of accordingly.
	The trees and hedgerows should be retained where possible and protected from any development by way of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
	Artificial lighting can affect the feeding and commuting behaviour of bats. Bats will use the brook and the tree line for foraging and commuting. We would therefore recommend that any lighting (during construction and post development) be directed away from any of the retained trees.
Overall Ecological Constraints	There are few ecological features on the site that would be considered to be significant constraints to future development. Boundary habitats are of some local value but these could be accommodated into any future development proposals

#### 6.2 SITE 40

The site comprises a number of cattle/sheep grazed fields located to the west of the Caton catchment. The main Lancaster Road (A683) forms the sites northern boundary and the Artle Beck forms its western boundary. Residential properties and Brookhouse Lane form its southern boundary and Home Lane and residential properties, opening out onto open countryside, its eastern boundary.

The site is undulating and wet with several pools, marshy grassland areas and flushes. The marshy areas were dominated by soft rush with some marsh thistle, although the site was surveyed in February so other species associated with wet ground may have been missed.

A number of hedgerows occur on the field margins with mature oak trees within the hedgerow to the east of the site and a number of scattered trees, mostly hawthorn, occuring within the site itself. A number of mature and semi-mature trees occur along Artle Beck and include sycamore, ash, oak, beech and hawthorn.

Lapwing, snipe, black headed gull and mallard were recorded using the pools and marshy areas. Blackbird and pheasant were recorded in the open fields, robin and house sparrows were recorded from the hedge and starling, wood pigeon and magpie were recorded in the trees. Other birds which have been recorded from the site and include curlew, swift and grey heron. Common frog has also been recorded. Rabbits were recorded during the site visit and a number of mole hills occur across the site.

No buildings are present on the site. Daubenton and Common pipistrelle bats have been recorded using Artle Beck for foraging and commuting. European otter has also been recorded from this watercourse, together with a number of fish which include Atlantic salmon, brown trout, bullhead and eel. The Beck is an important wildlife corridor and is a feeder for the River Lune.

The invasive plants Himalayan balsam and giant hogweed have been recorded on parts of this watercourse.

The trees on site have the potential to support bats and the trees, fields and hedges have the potential to support nesting birds.



Photo 5 A view of the hedgerow to the east of the site, site 40



Photo 6 A large established pool in the centre of site 40



Photo 7 One of the marshy areas where snipe were recorded



Photo 8 Undulating land form, site 40



Photo 9 Hedge line along the A683



Photo 10 Pools of water near to the road at the north of the site



Photo 11 Artle Beck – a Wildlife corridor





Photo 12 – sheep pasture, site 40

Further Surveys Recommended	<ul> <li>Nesting birds</li> <li>Wintering birds</li> <li>Bat survey (trees)</li> <li>Otter</li> <li>Amphibian</li> <li>Invasive species</li> </ul>
Recommendations:	Hedgerows are a UK biodiversity Priority Habitat. The trees and hedgerows should be retained where possible and protected from any development by way of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
	Ponds and Rush Pasture are UK Biodiversity Priority Habitats. The large pools on site and the marshy areas are important for bird species such as snipe and lapwing for feeding and nesting and could support amphibians. These areas should be retained, where possible and protected from any development.
	Artificial lighting can affect the feeding and commuting behaviour of bats. Bats are likely to use Artle Beck and the retained trees on site for foraging and commuting. We would therefore recommend that any lighting (during construction and post development) be directed away from Artle Beck and any of the retained trees.
Constraints	There are potentially significant ecological constraints associated with the development of this site

#### 6.3 SITE 97

An area of land which has previously been used as a horse paddock.

The area comprises grassland which is surrounded on all sides by hawthorn hedges; a sycamore occurs in the hedge line.

The site is situated on the north side of the A683, Lancaster Road, which forms its southern boundary, opposite site 40. There is a track which forms its northern and western boundary and to the east is a residential property and its associated gardens. The hedgerows and tree have the potential to support nesting birds.



Photo 13 View of the paddock, looking east, site 97



Photo 14 general extent and character of site 97

Further Surveys Recommended	Nesting birds
Recommendations:	Hedgerows are a UK biodiversity Priority Habitat. The trees and hedgerows should be retained where possible and protected from any development by way of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
Constraints	No significant ecological constraints

#### 6.4 SITE 39

A horse-grazed paddock with a small chicken shed and an area of rushy pasture.

Residential properties form its northern boundary. Residential gardens and open countryside also form its eastern boundary and open countryside are to the south and west of the site. The site is to the south of the Brookhouse catchment area. There are trees on the south and west field margins, a stone wall forms its northern boundary and an ornamental hedgerow to the east along the residential gardens. A blackbird was recorded in one of the trees during the visit. The trees and hedges have the potential to support nesting birds.



Photo 15 Chicken shed in the north east corner of the site, site 39





Photo 16 Rushy pasture, site 39

Photo 17 Horse grazed paddock, site 39

Further Surveys Recommended	Nesting birds
Recommendations:	Hedgerows are a UK biodiversity Priority Habitat. The trees and hedgerows should be retained where possible and protected from any development by way of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
Constraints	No significant ecological constraints

#### 6.5 ARTLE BECK BRIDGE SITE

An area of wet pasture land (semi-improved grassland) with areas of scattered rushes, possibly used for horse grazing. A number of young trees occur on the field margins with a number of gaps within the trees. A hawthorn hedge is present on the northern boundary along Brookhouse Road with a number of beech trees growing within the hedgeline. A track forms the western boundary and on the other side of the track is Artle Beck. A pheasant was recorded on the site during the site visit. The trees, fields and hedgerow could be used by nesting birds.



Photo 18 A view of the pasture with young trees on the field margins, Artle Beck Bridge



Photo 19 Hedgerow & trees lining the road



**Photo 20 Pasture looking west** 

# Conclusions and Recommendations for Artle Beck Bridge Site

Further Surveys Recommended	<ul><li>Nesting birds</li><li>Otter</li><li>Invasive species</li></ul>
Recommendations:	The trees and hedgerows should be retained where possible and protected from any development by way of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
	Artificial lighting can affect the feeding and commuting behaviour of bats. Bats are likely to use Artle Beck and the retained trees on site for foraging and commuting. We would therefore recommend that any lighting (during construction and post development) be directed away from Artle Beck and any of the retained trees
	The hedgerows could be improved at this site by filling in the gaps with a number of various different hedgerow species. Species could include: blackthorn, guelder rose, holly, hawthorn
Constraints	Trees, hedgerows and the Beck are potentially significant constraints

#### 6.6 SITE 93

An area of amenity grassland used for football situated inside the Caton catchment.

The site is surrounded on all sides by residential housing. A short hedgeline of hawthorn occurs at its eastern boundary and trees occur around the perimeter in residential gardens.

Two buildings occur in the south west corner of the site, but do not appear to be within the site boundary. The buildings are associated with the football club, the larger of the two being used for storage and the small as a canteen. Both buildings are cladded with wood, the larger having a pitched roof covered in bitumen roofing felt. The smaller building has a corrugated metal roof. Both buildings are considered to have a low potential to support bats and birds, with much more suitable properties surrounding this piece of land.

No records of protected species were found on the Local Record Centre database for this site. The hedgerow has the potential to support nesting birds.



Photo 21 The hedgerow to the west of site 93



Photo 22 Amenity grassland, site 93



Photo 23 Buildings associated with site 93

Further Surveys Recommended	Nesting birds
Recommendations:	Hedgerows are a UK biodiversity Priority Habitat. The trees and hedgerows should be retained where possible and protected from any development by way of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
	Although both buildings were considered to have a low potential to support roosting bats. If the buildings are to be demolished then care should be taken during demolition. If in the unlikely event that bats are found or suspected, then works should cease immediately and advice sought from a suitably qualified bat worker.
Constraints	No significant ecological constraints

#### 6.7 SITE 94

An area of amenity grassland planted with scattered conifers, pines and some holly and larch. Primrose, daffodils and lords and ladies have been planted within this area adjacent to the church. To the east of this area is a horse grazed paddock with some young birch trees. The northern boundary is a track which leads to Artle Brook; an industrial park forms its southern boundary, station road is its western boundary and an area of trees leading down to the brook its eastern boundary.

No records of protected species were found on the Local Record Centre database for this site. Birds could use the trees for nesting



Photo 24 Area to the south of the church planted with trees, site 94



Photo 25 Horse grazed pasture to the east site 94

Further Surveys Recommended	Nesting birds
Recommendations:	The trees should be retained where possible and protected from any development by way of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
Constraints	No significant ecological constraints

#### 6.8 SITE 88

Site 88 is a small industrial area named Caton Depot, used for the storage of gritting machinery and grit. Several large industrial units occur on site together with a number of single storey prefabricated buildings. Areas of hardstanding are present throughout the site. Full access was not possible into this working site compound.

Several large trees are present on the northern boundary. A house with a large garden which leads down to Artle Beck is present at the east of the site. A garden pond is present within the garden close to the river. A close inspection of the pond was not possible. The trees and some of the buildings have the potential to support nesting birds. The house has the potential to support roosting bats and the pond has the potential to support amphibians.

No records of protected species were found on the Local Record Centre database for this site



Photo 26 Industrial units, site 88



Photo 27 general view, site 88



Photo 28 Prefabricated buildings site 88



Photo 29 Machinery Storage and trees on the northern boundary, site 88



Photo 30 House at the eastern end of site 88



Photo 31 Garden pond at the end of the garden, close to Artle Beck, site 88

Further Surveys Recommended	<ul><li>Nesting birds</li><li>Bats surveys (trees and buildings)</li><li>Amphibian survey of pond</li></ul>
Recommendations:	The trees should be retained where possible and protected from any development by way of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
Constraints	Limited, although bats and amphibians need to be considered

#### 6.9 SITE 90

Site 90 is an area of amenity grassland, used as a football pitch, surrounded by houses, with a children's play area at the east of the site. Some small scattered trees occur within the site. The play area was having bark surfacing laid at the time of the survey.

It is unlikely that birds would use the young trees for nesting.

Starling records appear on the LRC database.



Photo 32 Amenity grassland and scattered young trees, site 90



Photo 33 Play area and amenity grassland, site 90

Further Surveys Recommended	None
Recommendations:	It is unlikely that birds will use the young trees on site for nesting, but this cannot be ruled out. All birds, with the exception of certain pest species, and their nests are protected under the terms of the Wildlife and Countryside Act 1981 (as amended). We would therefore recommend that is works to the trees are to be undertaken in the main bird breeding season (March-July inclusive), that they are inspected for nesting birds prior to works
Constraints	No significant ecological constraints

#### 6.10 SITE 100

The site comprised a number of fields, hedgerows and trees. A stream was present in the south west corner of the site which runs into Artle Beck. Access was not possible into these fields but all of the fields could be seen from various vantage points. The majority of the fields looked to have been cut for hay and the ground was very wet in places. Thick hawthorn hedges were present on the field margins, the occasional gap occurs within the hedgelines.

Some mature and semi-mature trees were also present within the hedgerows. Large mature trees were present along the river corridor to the east of the site. Residential properties and a school form the sites northern boundary, Quernmore Road its western boundary, open fields to the south of the site and Artle Beck to the east. Black headed gulls, magpies and pheasants were recorded within the fields. A number of mole hills were also present. Nesting waders are reported from this site. Common pipistrelle bat are recorded commuting and foraging along the watercourse. Hedgehogs have been recorded from the gardens close by together with house sparrow and starling.

The field's trees and hedges could be used by nesting birds and the mature trees along Artle Beck could also have features which could support roosting bats. Hedgehogs could be present within the hedgerows.



Photo 34 Showing the mature trees along the water course, site 100



Photo 35 Stream on the edge of the south west corner, site 100



Photo 36 Field and hedgeline, site 100



Photo 37 Mature oak in the hedgeline, site 100



Photo 38 Pheasants and wet ground, site 100

Further Surveys Recommended	<ul> <li>Nesting birds (nesting waders have been recorded from this site)</li> <li>Otter surveys</li> <li>Bats surveys (trees)</li> </ul>
Recommendations:	Hedgehogs have been recorded close to the site. Hedgehogs hibernate between October and March and use hedgerows and other vegetation for cover. We would therefore suggest that in the interest of best practice, between October and March the hedgerows or other suitable materials and vegetation within the area should be checked for hibernating hedgehogs before disturbance/works.
	Artificial lighting can affect the feeding and commuting behaviour of bats. Bats are likely to use the stream and the retained trees on site for foraging and commuting. We would therefore recommend that any lighting (during construction and post development) be directed away from the stream and any of the retained trees and hedgerows.  Hedgerows are a UK biodiversity Priority Habitat. The trees and hedgerows.
	Habitat. The trees and hedgerows should be retained where possible and protected from any development by way

	of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
Constraints	The stream course, hedgerows and trees are locally important features and could constrain development

#### 6.11 SITE 98

A small field previously grazed, slightly undulating towards the north west of the site. Quernmore Road forms its western boundary, a track, which splits it from site 99, is at its eastern boundary and to the north and south are farm buildings. The ground on this site is very wet.

A stone wall occurs along Quernmore Road and half way along the wall a hedge is present on the field side.

No faunal species were recorded on the site visit and the Local Record Centre hold no protected species records for this site although hedgehog are recorded from the adjacent site (99).



Photo 39 Field and stone wall along Quernmore Road, site 98







**Photo 41 Farm Buildings** 



Photo 42, Wet sloping ground, site 98

Further Surveys Recommended	Nesting birds
Recommendations:	Hedgehogs have been recorded close to the site. Hedgehogs hibernate between October and March and use hedgerows and other vegetation for cover. We would therefore suggest that in the interest of best practice, between October and March the hedgerows or other suitable materials and vegetation within the area should be checked for hibernating hedgehogs before disturbance/works.
	Hedgerows are a UK biodiversity Priority Habitat. The trees and hedgerows should be retained where possible and protected from any development by way of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
Constraints	No significant ecological constraints

#### 6.12 SITE 99

The field, adjacent to site 98, has also been previously grazed and is divided by a track to the east which forms its eastern boundary.

Escow Beck watercourse forms its western boundary, farm buildings are present to the south and Quernmore Road and open fields form the sites northern boundary. The fields have previously been grazed and are wet. An indentation occurs within the site which could be an ephemeral pond. An area of willow carr (wet woodland) occurs to the west of the site, adjacent to Escow Beck and some stands of the invasive Japanese knotweed are present along the edge of the wet woodland.

Some mature trees occur along the western field margin and an area of woodland occurs in the north-west corner of the site, although not in the red line area. An area of planted trees occur in the north eastern corner of the site, this area is very disturbed and has been used for storage of machinery and vehicles. No ground flora was visible. The planted woodland, hedges and the field could be used by nesting birds. Hedgehog has been recorded on the site. Mole hills were recorded during the site visit together with grey squirrel, blackbird and woodpigeon.

The invasive Japanese knotweed was also present on the site.



Photo 43, wet inundation within site 99



Photo 44 Mature trees on the western boundary, site 99



Photo 45, Willow Carr, site 99



Photo 46 Japanese Knotweed on the western boundary, site 99



Photo 47 Planted woodland edge at the north eastern corner, site 99



Photo 48 Within the planted woodland, site 99



Photo 49 Old machinery and open building within planted woodland, site 99

Further Surveys Recommended	<ul><li>Nesting birds</li><li>Bats surveys (trees)</li></ul>
Recommendations:	Hedgehogs have been recorded close to the site. Hedgehogs hibernate between October and March and use hedgerows and other vegetation for cover. We would therefore suggest that in the interest of best practice, between October and March the hedgerows or other suitable materials and vegetation within the area should be checked for hibernating hedgehogs before disturbance/works.
	A small area of wet woodland occurs on the site. Wet woodland is a UK Biodiversity Habitat. We recommend that his area of woodland is retained on site.
	Hedgerows are a UK biodiversity Priority Habitat. The trees and hedgerows should be retained where possible and protected from any development by way of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
	Artificial lighting can affect the feeding and commuting behaviour of bats. Bats are likely to use Escow Beck and the retained trees on site for foraging and commuting. We would therefore recommend that any lighting (during construction and post development) be directed away from Escow Beck and any of the retained trees
	The invasive Japanese knotweed is present on site. This species is listed on Schedule 9 of the Wildlife and Countryside Act and it is an offence under the terms of the Wildlife and

	Countryside Act to allow this plant to grow in the wild. This species should be eradicated from the site and disposed of accordingly
Constraints	The woodland, watercourse and hedgerows could pose significant ecological constraints to development.  The stands of Japanese knotweed will need to be controlled.

#### 6.13 SITE 92

Site 92 comprises grazed field with scatted trees. The trees comprise oaks, Scot's pine birch and beech. The northern boundary is the main Lancaster Road. Quernmore Road forms its eastern boundary and there are open fields to the south and west of the site.

A fence line of metal and barb wire is present to the north and east of the site. Jackdaws were seen feeding on the fields at the time of the survey.

The Local Record Centre search showed a hedgehog record in the adjacent field and a Soprano Pipistrelle bat roost in the Grange at the north of the site. Daubenton bat, Brandt and Soprano Pipistrelle are also recorded from Escow Beck which is to the east and south of the site. Some of the mature trees on site have the potential to support nesting birds and roosting bats.



Photo 50 Scattered trees on the edge of the site, site 92



Photo 51 Pasture dominating site 92

Further Surveys Recommended	<ul><li>Nesting birds</li><li>Bats surveys (trees)</li></ul>
Recommendations:	Hedgehogs have been recorded close to the site. Hedgehogs hibernate between October and March and use hedgerows and other vegetation for cover. We would therefore suggest that in the interest of best practice, between October and March any vegetation within the area should be checked for hibernating hedgehogs before disturbance/works.
	The trees should be retained where possible and protected from any development by way of temporary fencing to prevent damage to the root system. Protection should follow guidelines presented within BS 5837:2012 'Trees in relation to design, demolition & construction'.
	Artificial lighting can affect the feeding and commuting behaviour of bats. Bats are likely to use Escow Beck and the retained trees on site for foraging and commuting. We would therefore recommend that any lighting (during construction and post development) be directed away from Escow Beck and any of the retained trees
Constraints	The stream course and trees are locally important features and could constrain development

#### 6.14 SITE 89

An area of rank grassland, scrub, secondary woodland and fisherman's car park, a small concrete building is also present on site, which is open to the elements and unsuitable for use by bats. The field supports soft rush, teasel, cocksfoot, willowherb, dogwood and bramble. Dumping of materials occurs on the site. The secondary woodland comprises silver birch, beech and holly and the only ground flora species recorded was ivy.

Cotoneaster, which can be invasive, was present on south east corner of the woodland. Wood pigeon, blue tit and goldfinch were recorded during the site visit.

The Local Record Centre hold records for Soprano pipistrelle on the adjacent fishing lodge. Amphibians could be present in the fishing lodge, although it is considered unlikely that Great Crested Newts are present due to the presence of the fish. Amphibians could use the woodland and areas of rubble for hibernacula and so could small mammals such as hedgehog.



Photo 52 Rank grassland both sides of the track, site 89



Photo 53 Dumping of material on site 89, potential amphibian and small mammal refuges



Photo 54 Secondary woodland and small concrete shed, site 89



Photo 55 Cotoneaster on the south east corner of the woodland, site 89

Further Surveys Recommended	Nesting birds
Recommendations:	Amphibians and hedgehogs hibernate between October and March and use rubble piles and other vegetation for cover. We would therefore suggest that in the interest of best practice, between October and March the rubble piles or other suitable materials and vegetation within the area should be checked for hibernating amphibians and hedgehogs before disturbance/clearance. It is unlikely Great Crested Newts would use the adjacent fishing lodge due to the presence of fish. However if Great crested newts are found at any time during the works, then work should cease immediately and advice sought from a suitably qualified ecologist.
	A species of Cotoneaster is present on site, some species of cotoneaster are listed on Schedule 9 of the Wildlife and Countryside Act and it is an offence under the terms of the Wildlife and Countryside Act to allow this plant to grow in the wild. This species should be disposed of accordingly
Constraints	Amphibians, woodland and wetter grassland areas could pose a local constraint.
	Cotoneaster will need to be controlled

### 7 The Overall Ecological Character of the Parish

The Parish is predominantly rural and open in character; built development is concentrated in the villages of Caton and Brookhouse in the north close to the Lune Valley, and occupies relatively little of the overall land area of the Parish.

The boundaries of the parish include a large area of important upland to the south, the majority of which is a designated Site of Special Scientific Interest (SSSI) and a Special Protection Area (for birds) for special, internationally important wildlife value.

The lowland areas support pastoral agriculture, part improved and part semiimproved, with relatively small field sizes bordered by hedgerows and walls. The urban development Small woods punctuate the landscape in the lower lying areas.

### 7.1 Special Protection Areas (Bowland Fells)

The Special Protection Area (SPA) to the south of the parish is internationally important for a number of bird species. This area is also designated as a Site of Special Scientific Interest.

This very large upland area is an important biodiversity asset for the Parish.

The designated sites are over 2km from the proposed development sites and therefore will not be impacted by development of any of the proposed site allocations.

### 7.2 Other Sites of Special Scientific Interest

Two further Sites of Special Scientific Interest (SSSI's), Burton Wood and Artle Dale, are also present within the parish boundaries and within a 2km 'buffer zone' of the proposed development sites.

Whilst the proposed site allocations fall within a number of SSSI Impact Risk Zones the likely scale and type of development proposed developments do not fall into any of the Impact Risk Categories. The developments are therefore unlikely to impact the SSSI's.

### 7.3 Biological Heritage Sites

Eight Local Wildlife Sites, Biological Heritage Sites (BHS), occur within the 2km buffer zone of the proposed site allocations.

The BHS sites support a range of important habitats but are dominated by wetlands and broadleaved woodland sites. The River Lune is itself one of the BHS sites and the watercourse, together with the associated woodland habitats, forms an important wildlife corridor along the northern boundary of Brookhouse and Caton. Several Becks associated with the river course are present within the 2km buffer zone; these include Artle Beck, Escow Beck,

Kirk Beck and Bull Beck. The Becks are important habitats and also provide corridors which are important for species movement through the Parish.

### 7.4 Hedgerows

The lowland areas of the parish are characterised by established hedgerows and mature hedgerows are associated with a a number of the proposed allocations. According to the UK Government advisors on nature conservation, the Joint Nature Conservation Committee (JNCC):

"Hedgerows are the most significant wildlife habitat over large stretches of lowland UK and are an essential refuge for a great many woodland and farmland plants and animals."

Hedgerows are the principal habitat for around 50 existing species of conservation concern in the UK, including 13 globally threatened or rapidly declining species (more than for most other key habitats). They are particularly important for butterflies and moths, farmland birds, bats and dormice. There is an estimated ½ million km of hedgerow in England and Wales, of which 42% (about 154,000 km) are ancient and/or species-rich.

Over 600 plant species, 1500 insects, 65 birds and 20 mammals have been recorded at some time living or feeding in hedgerows. Over 100 species of invertebrates can be found in a typical 20-metre section of hedgerow. Hedgerows adjacent to roads, green lanes, tracks and wooded ground tend to be particularly species-rich.

Hedgerows also act as wildlife corridors for many species, including reptiles, mammals, amphibians, bats and birds allowing movement between other habitats. Hedgerows should be retained throughout the development and where gaps occur they should be filled with a variety of native hedgerow species.

For all of these reasons the hedgerows of the Parish are a very important ecological asset and they should be retained, protected and enahcned wherever possible.

#### 7.5 Woodlands and Veteran Trees

Broadleaved Woodlands, closely associated with water courses and river valleys, provide important refuges for wildlife in the agricultural landscape. Woodlands are a priority habitat for conservation and existing woodlands are an asset to the Parish and should be retained and protected.

A number of mature (veteran) trees are present throughout the proposed site allocations, most of which are associated with the hedgerows. Mature trees provide habitat for a wide array of wildlife.

A wide range of birds nest inside tree cavities, some adopting existing cavities with little or no modification - such as owls, kestrels, marsh tit, treecreeper -

while others modify the cavity and its access considerably, e.g. woodpeckers and nuthatch. Some are directly dependent on the trees for the bulk of their food, including foliage gleaners such as warblers, while others are specialists on wood-decay invertebrates plus invertebrates which are merely sheltering in the wood, e.g. overwintering or nocturnal insects. Generally the bird does not concern itself with why the particular invertebrate is where it is, its only concern is merely eating it. Woodpeckers are the main birds which specifically break into decaying wood in search of food - even nuthatch and treecreeper are mainly gleaning prey from the external surfaces and shallow cavities. Mature trees should be retained as part of any proposed development.

For all these reasons veteran trees should be specially protected as a valuable ecological asset for the Parish.

# Appendix 1 - Maps





