

BOW0017/293 Chews Farm Clitheroe, Waddow View Phase 2

Ecological Assessment

Introduction

Bowland Ecology Ltd was commissioned by The Huntroyde Estate, Clitheroe Auction Mart Co Ltd, Mr J Taylor, Ms Sarah Howard & Ms Samantha Howard to undertake an extended Phase 1 habitat survey of a site to the south west of Waddington Road, Clitheroe, Lancashire (NGR; SD 737 423). The survey was undertaken in order to assess any ecological effects of an outline planning application for the Waddow View Phase 2 development. This report provides the results of the extended Phase 1 survey along with additional bat surveys undertaken, highlighting any potential ecological constraints and legal obligations in respect of protected habitats and species.

Methodologies

Desk Study and Data Search

A targeted desk study was undertaken of the site and a 1.5km buffer zone to search for records of statutory and non-statutory wildlife sites, legally protected and notable species involving an online search of the National Biodiversity Network (www.nbn.org.uk) and Natural England's Nature on the Map (<http://www.natureonthemap.org.uk/>). The UK and Local Biodiversity Action Plans were also consulted. Further information relating to ecological interests was sought from Lancashire County Council Records Centre. The aim of the desk study was to identify the presence of any notable site and/or species records for the area.

Phase 1 Habitat Survey

The initial survey of the site was undertaken on the 6th March 2012 by Alice Helyar PhD, MSc, BSc (Hons), MIEEM with an update survey of a piece of additional land undertaken in September 2012 by Emma Kilduff BSc (Hons), AIEEM. The surveys undertaken followed Phase 1 habitat survey methodology (JNCC, 1993) and assessed all features of ecological significance within the survey area; these features were target noted. The survey was extended such that evidence of fauna and faunal habitat is also recorded (for example droppings, tracks or specialist habitat such as ponds for breeding amphibians). The extended Phase 1 survey is a modified version of the Phase 1 survey and follows the approach recommended by the Guidelines for Baseline Ecological Assessment (IEA, 1995). This involves walking the whole site, mapping and describing the habitats present (e.g. woodland, grassland, scrub) and recording evidence of fauna and faunal habitat (e.g. droppings, tracks or specialist habitat such as ditches for water voles).

The weather during the surveys was dry and clear with no appreciable wind or rain. The timing of the surveys was within the optimum period for completing such a survey, the conditions were suitable and the whole of the site was accessible. As a result, a comprehensive and valid assessment of the habitats present and their potential to support legally protected species was undertaken.

A Phase 1 habitat plan is shown in appendix 1 of this report. Photographs of the habitats on site are included in appendix 2.

Water Vole Survey

A water vole (*Arvicola terrestris*) survey of the drain bordering the north-western boundary of the site was undertaken in September 2012. The drain running through the

centre of the site is considered to offer low potential habitat for water vole due to its polluted and frequently drying nature. The method for the water vole survey followed Strachan & Moorhouse (2006) Water Vole Conservation Handbook 2nd Edition. During the survey the following evidence of water voles was searched for: sounds of water voles entering the water (a distinctive 'plopping' noise), burrow entrances, feeding stations, latrines or droppings, waterside paths, runs in vegetation and footprints. Signs of brown rat (*Rattus norvegicus*), bank vole (*Clethrionomys glareolus*) and field vole (*Microtus agrestis*) were also searched for, as these can easily be confused with those of water vole.

Bat Emergence Survey

A single bat emergence survey was undertaken on the 26th September 2012 of a single two storey stone barn present within the north-eastern corner of the site. The survey was undertaken by Emma Kilduff BSc (Hons), AIEEM and Gemma Howard BA (Hons). The survey was undertaken in accordance with the Bat Conservation Trust (BCT) Good Practice Guidelines. The surveyors were positioned one either side of the building, adjacent to the western and eastern elevations, so that all aspects of the building were in view. The survey was undertaken between the times of 18.30pm until 20.30pm with sunset being at 18.45pm using Batbox Duet and Hetrodyne Bat Detectors.

Results

An online search revealed the following relevant BAP species within the 10km OS grid square SD74:

- Soprano pipistrelle (*Pipistrellus pygmaeus*), 4 records recorded in 2005 (2), and 2006 (2).
- Common grasshopper warbler (*Locustella naevia*), 3 records between 2003 and 2009.
- Eurasian curlew (*Numenius arquata*) 78 records between 2001 and 2009.
- Eurasian tree sparrow (*Passer montanus*), 9 records between 2002 and 2009.
- House sparrow (*Passer domesticus*), over 100 records between 2008 and 2009.
- Grey partridge (*Perdix perdix*) 29 records most between 2002 and 2009.
- Lesser redpoll (*Carduelis cabaret*) 14 records between 2002 and 2009.
- Northern lapwing (*Vanellus vanellus*) 74 records between 2001 and 2009.
- Reed bunting (*Emberiza schoeniclus*) 2 records in 2009.
- Ring ouzel (*Turdus torquatus*) recorded between 2004 and 2009.
- Spotted flycatcher (*Muscicapa striata*) 47 records between 2001 and 2009.
- Tree pipit (*Anthus trivialis*) 16 records between 2002 and 2009.
- Also recorded were darnel (*Lolium temulentum*), field gentian (*Gentianella campestris*), wall butterfly (*Lasiommata megera*), small heath butterfly (*Coenonympha pamphilus*), Duke of Burgundy (*Hamaeris lucina*), cinnabar moth (*Tyria jacobaeae*), latticed heath (*Chiasmia clathrata*) and shaded broad-bar (*Scotopteryx chenopodiata*).

There are two statutory wildlife sites within the 1.5 km search area as follows;

- Coplow Quarry SSSI (SD 751 432) – designated for its geological interest, notably exposures of Coplow Knoll or Chadian age and its associated exposures and echinoderm fauna.
- Salthill and Bellmanpark Quarries SSSI (SD 758 427) – designated for its geological interest, notably Carboniferous limestone, fossiliferous Salthill Bank Beds (Chadian) and Salthill Cap Beds (Arundian).

There are nine non statutory wildlife sites within the 1.5 km search area as follows;

- Dog House Wood BHS
- Primrose Lodge BHS
- River Ribble, London Road to County Boundary BHS
- Salthill Quarry BHS
- Coplow Quarry and Pimlico Road Grasslands BHS
- Cross Hill Quarry BHS
- Sherburn Wood BHS
- Boy Bank BHS
- Clitheroe Castle Knoll BHS

The nearest BHS to the site is Castle Knoll, at approximately 500 m in a south westerly direction. Due to the distance from the site it is not predicted that any of the BHS sites will be adversely affected by the development.

Consultation with Lancashire County Council highlighted the presence of numerous BAP records within 1.5 km of the site including pochard, teal, swallow, curlew, starling, song thrush, bullfinch, lapwing, redshank, water vole, hedgehog, bat (species not identified), and numerous flowering plants and ferns. None of the above was recorded within 500 m of the site; however bird and mammal species are likely to be present within the local area.

Habitat descriptions

The site is situated to the north of the town of Clitheroe, Lancashire. The site largely comprises species-poor semi-improved grassland fields, bordered by species-poor hedgerows and scattered trees. A stream runs through the centre of the site and a drain borders the north western boundary. To the north east, east and south east the site is surrounded by residential developments and a railway line. Agricultural land, dominated by improved and semi-improved grassland, with a network of hedgerows and scattered trees surrounds the site to the north-west, west and south west. A cemetery is present to the north and the River Ribble is located approximately 300 m to the north-west of the site. One building is present within the site; it is a two storey height stone barn. No ponds were found within 250 m of the site.

The majority of the site consists of species-poor semi-improved grassland fields, which appear in part to be cattle and sheep grazed as well as being used for silage production. The dominant species present include perennial rye grass (*Lolium perenne*), smooth meadow grass (*Poa pratense*), dandelion (*Taraxacum* agg.) cock's foot (*Dactylis glomerata*), creeping buttercup (*Ranunculus repens*), creeping bent (*Agrostis stolonifera*), Yorkshire fog (*Holcus lanatus*) and dock species (*Rumex* sp.), with hogweed (*Heracleum sphondylium*), Umbellifer sp., lesser celandine (*Ranunculus ficaria*), creeping thistle (*Cirsium arvense*), common nettle (*Urtica dioica*), cleavers (*Galium*

aparine) and willowherb species (*Epilobium* species) occurring around the edges of the fields. The ground in the northern most fields is damper in nature, with the flora reflecting such conditions (soft rush (*Juncus effusus*) and *Glyceria* sp.).

The hedgerows bordering the fields range in structure and species composition from intensively managed with regular cutting regimes to out grown hedgerows which could be described as rows of trees. They predominantly comprise species such as hawthorn (*Crataegus monogyna*), elder (*Sambucus nigra*), and blackthorn (*Prunus spinosa*), with occasional ivy (*Hedera helix*), ash (*Fraxinus excelsior*), holly (*Ilex aquifolium*) and bramble (*Rubus fruticosus*).

A number of scattered mature and semi-mature trees are present within the hedgerows. The trees predominantly comprise ash and alder (*Alnus glutinosa*).

A drain borders the north western boundary of the site and is approximately 1 m in width and 0.3 m in depth. The drain has some flow towards the northern end. It is open and has steeply sloping, densely vegetated banks and is not heavily shaded. Brooklime (*Veronica beccabunga*) is frequent within the feature. The watercourse is considered to provide suitable habitat for water vole.

A watercourse is present through the center and north eastern half of the site; it flows into the drain that runs along the north western boundary. The stream is approximately 1 m wide and 0.5 m in depth. The watercourse has a fluctuating depth and frequently dries out. It has vertical and steeply sloping banks with dense bankside vegetation that is not shaded. The base of the stream is stone and mud, with frequent occurrence of rubbish and black plastic. The water is discoloured (grey) indicating that some pollution/discharge is entering the stream.

Small areas of scrub and tall ruderals were found adjacent to the field boundaries. The scrub comprises dense pockets of bramble, whilst the tall ruderals are dominated by willowherb species (*Epilobium* sp.).

One building is present within the site boundary; it consists of a two storey stone barn with a single storey extension. The barn has a pitched tiled roof, with the tiles on batons and no liner. Large holes are present in the roof, exposing the interior to external conditions. Some mortar work is missing from the walls. The building is in a poor state of repair and is considered to be of low to moderate potential for roosting bats.

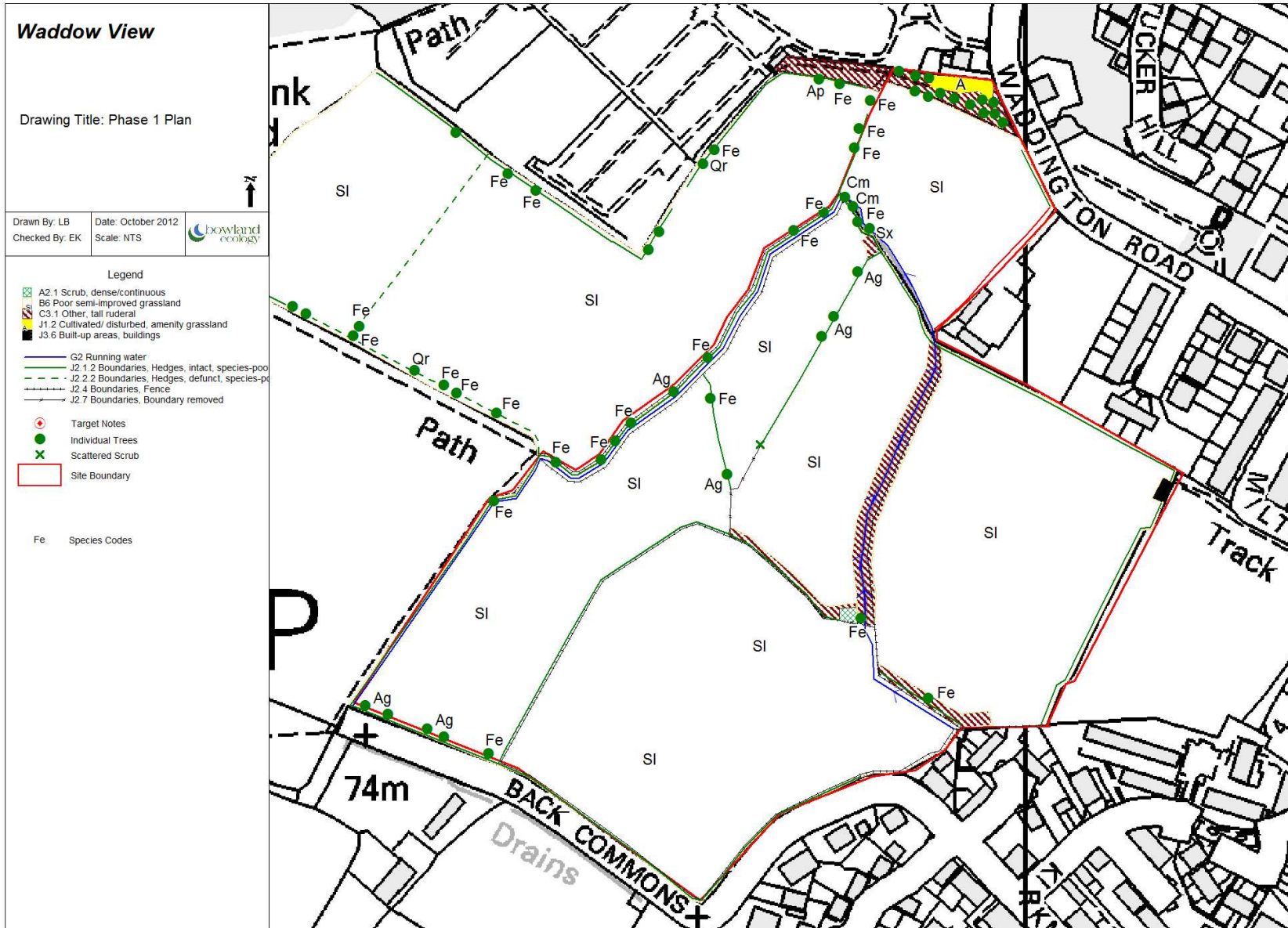
Protected species

The hedgerows throughout the site are suitable for use by nesting birds; during the initial survey a number of species were observed within the hedgerows including blackbird, robin, linnet, chaffinch, woodpigeon, crow, house sparrow, great tit, blue tit and wren. Mallard were also observed within the grassland fields.

Some of the mature trees situated within the hedgerow boundaries are considered to provide suitable habitat for roosting bats in the form of visible crack/crevices and were considered to have high value for bats. The hedgerow and scattered trees boundaries provide suitable foraging habitat and commuting routes for bats.

An inspection and one bat emergence survey were undertaken by Emma Kilduff BSc (Hons), AIEEM and Gemma Howard BA (Hons) in September 2012 of the stone barn present on site. The inspection did not reveal any evidence of bats. During the emergence survey, common pipistrelle bats were observed foraging around all aspects

Appendix 1: Phase 1 Habitat Plan



Appendix 2: Phase 1 Photographs



Drain along northern boundary of site



Species poor semi-improved grassland



Tree with high value for roosting bats
the site



Watercourse running through the centre of



Species poor hedgerow



Species poor unmanaged hedgerow