

EXTENDED PHASE ONE HABITAT SURVEY

LAND OFF BLAST ROAD BRYMBO

GRID REFERENCE: SJ292536

Report by
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1 INTRODUCTION

1.1 BACKGROUND

Arbor Vitae Environment was commissioned to carry out a Phase One Habitat Survey off Blast Road, Brymbo. This site will be the subject of a planning application for the construction of seventeen new houses. This report sets out the results of the survey.

1.2 DETAILS OF PROPOSED WORKS

The work will involve the construction of seventeen new dwellings within an area of rough grassland. Vehicular access will be gained via Blast Road.

1.3 SCOPE OF SURVEY

This report sets out to establish the base-line ecological condition of the site and to identify and evaluate any potential impacts which the scheme may have, taking account of any mitigation and enhancement to the ecology which the scheme can offer.

Construction of these dwellings inevitably involves a change of land use and therefore has the potential to remove existing habitat and to physically disturb protected species, if present. The nature of surrounding habitat indicated that the following species could theoretically be affected by physical disturbance of habitats.

Protected species potentially affected:

- Badger
- Bat species
- Breeding birds
- Great crested newt

Other priority species potentially affected:

- Common lizard
- Slow worm
- Hedgehog

2 SITE DESCRIPTION

2.1 LOCATION AND LANDSCAPE

The site is located on a small triangular piece of unused land between existing houses and Blast Road. (See Location plan Figure 1). The site is within the conurbation of Brymbo and, more specifically, lies on the southern edge of a large housing development. The site is at approximately 250m above sea level.

The site lies immediately to the north of land which once formed part of the Brymbo Steelworks.

The landscape character of the surrounding area is demonstrated by the aerial photograph in Figure 2.

3 SURVEY METHODOLOGY

3.1 DESK STUDY

A number of data sets were investigated to ascertain the presence or otherwise of nearby land designations, scheduled sites or protected species. Sources which were used included MAGIC and the Forestry Commission Land Information search. COFNOD were requested to provide data on ecologically important sites and notable species within one kilometer of the site.

3.2 SITE SURVEY

A visit was made to the site on the 26 August 2017 to survey the property. The site was surveyed to identify specific habitats and potential opportunities for protected species or other key species. Adjacent land was inspected for evidence of key habitats or key species.

An assessment of the available habitats both on and adjacent to the site led to consideration of the potential of the site for the following protected species and key species:

- Badger
- Bats
- Breeding birds
- Great crested newts
- Hedgehogs

- Reptiles

The survey methodology was tailored to evaluate the area for these species.

Badger

An area within 50 metres of the site was closely searched for the following signs of badger activity: setts, tracks and footprints, latrines, snuffle holes.

Bats

Any nearby habitat such as old trees containing cracks and crevices were inspected for any signs of use, from the ground, and assessed for their potential to support bats.

Breeding birds

The habitat was assessed in terms of suitability for breeding birds, including any nearby hedgerows or trees.

Great crested newts

A map and ground search was made for any areas of open water within 250 metres.

Hedgehogs

An assessment was made of the habitat suitability for hedgehogs.

Reptiles

An assessment was made of the habitat suitability for reptiles including slow-worm and grass snake.

3.3 PERSONNEL

The survey was carried out by Will Prestwood BSc Hons: an ecologist and surveyor at Arbor Vitae Environment.

3.4 CONSTRAINTS

There were no constraints to the survey being carried out successfully.

4 SURVEY RESULTS

4.1 DESK STUDY

COFNOD have provided information on local sites of ecological interest and also notable species found within one kilometre of the site.

Nature conservation or other designations

One SSSI is found within one kilometre. This is the Brymbo fossil forest Geological SSSI situated 250 metres to the south.

Two County Wildlife Sites (Brymbo Pony fields and Mount Zion) are found within the one kilometre zone .

Protected species

The following protected species have been recorded within one kilometre:

Badger
Whiskered bat
Great crested newt
Bluebell

Priority species

The following priority species have been recorded within one kilometre:

Grass snake
Common lizard
Smooth newt
Hedgehog
Song thrush
Kestrel
Green woodpecker
Willow warbler
Skylark
Bullfinch
Swallow
Linnet

4.2 HABITATS ON SITE

Grassland

The land in question is predominantly grassland, presumably once a small paddock prior to construction of nearby houses. The grassland has evidently been unmanaged for many years and has seen the development of large areas of tall herb vegetation and some scrub.

The grassland is tussocky and dominated by tall grasses including cocksfoot, with false oat grass, Yorkshire fog and creeping bent. Herbaceous species are mainly tall perennials including hogweed, ragwort, creeping and meadow thistle, clustered dock and knapweed.

The grassland has little botanical interest but has some local value as a resource for invertebrates, small mammals and birds.

Tall herb vegetation

The grassland has now been largely invaded by tall herb vegetation including areas of rosebay willowherb and of bracken. Whilst being poor in plant species, these areas again provide a habitat for invertebrates, birds and small mammals.

Scrub

The lack of management of the site has encouraged the development of an area of blackthorn scrub which has invaded the southern edge of the field adjacent to an area of woodland on the southern slope by the road. The site also includes a large area of bramble and also of raspberry.

Woodland

The southern margin of the site is a steep slope above the road. This wooded embankment appears to have naturally regenerated with a range of tree and shrub species. This includes abundant young ash with occasional oak, sycamore, crab-apple, hawthorn and willow.

4.3 PROTECTED SPECIES

Badgers

No badger setts were found within 50 metres of the site and there is no evidence that badgers use the site for foraging or for access. Badgers have been recorded within 700 metres of the site.

Bats

It is likely that bats will use the edge of the peripheral woodland along which to forage. However, there are no features on the site which bats could exploit for roosting.

Breeding birds

The site has some local value to birds for foraging and feeding. However, nest sites are limited.

Great crested newts

A number of small ponds were constructed within the nearby Brymbo steelworks site about 15 years ago. These were constructed as receptor sites for great crested newts rescued from elsewhere on the Brymbo site. These ponds are approximately 75 metres from the proposed construction site. No recent records of GCN from the ponds are available although it is assumed that GCN are still present. COFNOD data refers to GCN being present.

4.4 KEY SPECIES

Hedgehogs

No evidence of hedgehogs was recorded on the site. COFNOD data confirms presence of hedgehogs approximately 600 metres north of the site.

Reptiles

COFNOD records indicate that common lizard has been recorded within 20 metres of the site. Grass snake has been recorded at Mount Zion 550 metres to the west of the site.

5 EVALUATION OF RESULTS AND POTENTIAL ECOLOGICAL IMPACT

5.1 HABITATS

The main habitat associated with this site is semi-improved grassland. This habitat is of minor, local ecological interest in that it provides a habitat for invertebrates, feeding birds and small mammals. Hedgehogs may utilise this habitat for foraging although no evidence has been recorded.

The tall herb vegetation, scrub and young woodland also has minor intrinsic ecological interest although, as a small mosaic, does provide a range of conditions for a range of invertebrates, birds and small mammals.

5.2 PROTECTED SPECIES

Badgers

No active sets were recorded within 50 metres of the site. The development will have no impact on badgers.

Bats

The proposals will not result in the loss of bat foraging habitat although increased illumination of the area might disrupt bat feeding behaviour. The retention of the woodland strip along the road will maintain habitat connectivity for bats.

Breeding Birds

The site is unlikely to support many breeding birds although a number of common species such as blackbird may use the scrub areas in which to nest. As there will be inevitable loss of a small area of scrub, there will be a resultant loss of nest sites, albeit on a small scale. Mitigation for this loss will be necessary.

Great crested newts

The site is close enough to GCN breeding ponds to provide suitable terrestrial habitat for this species. However, the existence of an intervening busy urban road is regarded as a significant barrier for dispersal of GCN and the likelihood of GCN using the site for foraging or hibernation is remote.

The adoption of Reasonable Avoidance measures by site operatives, as enshrined in a GCN Method Statement, will remove any small residual risk.

5.3 KEY SPECIES

Hedgehogs

The presence of hedgehogs is unlikely but, to avoid any risk to this species, site clearance should be carried out during winter months when hedgehogs are likely to be hibernating. There are no suitable hibernation sites on the site itself.

Reptiles

Given the local presence of grass snake and common lizard, and the suitability of the site to support these species, further survey work will be necessary to determine presence or absence of these species. Standard survey techniques will involve the placing of reptile 'refugia' or shelters and their monitoring over a period of eight weeks in early summer.

6 MITIGATION AND ENHANCEMENT

6.1 HABITAT MITIGATION

Less than 0.3 ha of semi-improved grassland will be affected by construction of seventeen new dwellings and associated infrastructure. No mitigation for the loss of this habitat is proposed.

6.2 PROTECTED SPECIES MITIGATION

Bats

The woodland on the edge of the site may be used by foraging bats. The retention of the woodland fringe on the south of the site will protect this habitat for bats. Increased illumination of this habitat should be avoided in order not to impact on bat foraging behaviour.

Breeding birds

The loss of a small area of scrub needs to be mitigated for by the inclusion of scrub areas in the site landscape plan, along with the erection of eight Schweidler Type 1B nest boxes in nearby trees,

Great crested newts

The risk to GCN has been shown to be small. However, Reasonable Avoidance Measures need to be adopted to ensure that any residual risk is avoided. These will involve:

- Timing of works
- Site clearance by hand with hand search of possible refugia sites
- Storage of materials to avoid creating GCN habitat

6.3 PRIORITY SPECIES MITIGATION**Hedgehogs**

Site clearance should be carried out during winter months when hedgehogs are likely to be hibernating. Three hedgehog domes should be placed in adjoining woodland to create hibernation sites.

Reptiles

If further survey work indicates that reptiles are present, a mitigation strategy will need to be agreed involving trapping and translocation of reptiles to a dedicated, safe habitat nearby.

7 CONCLUSION AND SUMMARY

The proposal to construct seventeen new dwellings on land at Brymbo has implications for habitats and protected species. This survey set out to establish the ecological value of the site and the potential impact of the proposals.

The habitats most affected by the proposals are semi-improved grassland and tall herb vegetation. This is of low botanical interest and holds little potential for protected species. However, it holds some value on a local scale for common species of invertebrates and birds and may provide foraging areas for hedgehogs, small mammals and common amphibians.

Breeding birds probably use patches of scrub as nesting habitat.

Reptiles including grass snake and common lizard have been recorded nearby. Further survey work is required to confirm presence or absence of these species,

Bats are likely to use the margin of adjacent woodland along which to forage but are unlikely to be affected by the development if external lighting is restricted.

Great crested newts breed in nearby ponds but the presence of a busy road creates a significant barrier to their dispersal and it is unlikely that the site is used by GCN as terrestrial habitat. Risk Avoidance Measures will need to be adopted in order to ensure no harm to this species results from the proposals.

Enhancement measures for protected species are recommended including:

- Planting of areas of native scrub as part of site landscaping
- Erection of four bat boxes in adjacent woodland
- Erection of eight bird boxes in adjacent woodland
- Installation of three hedgehog domes in adjacent woodland.

FIGURE 1: LOCATION

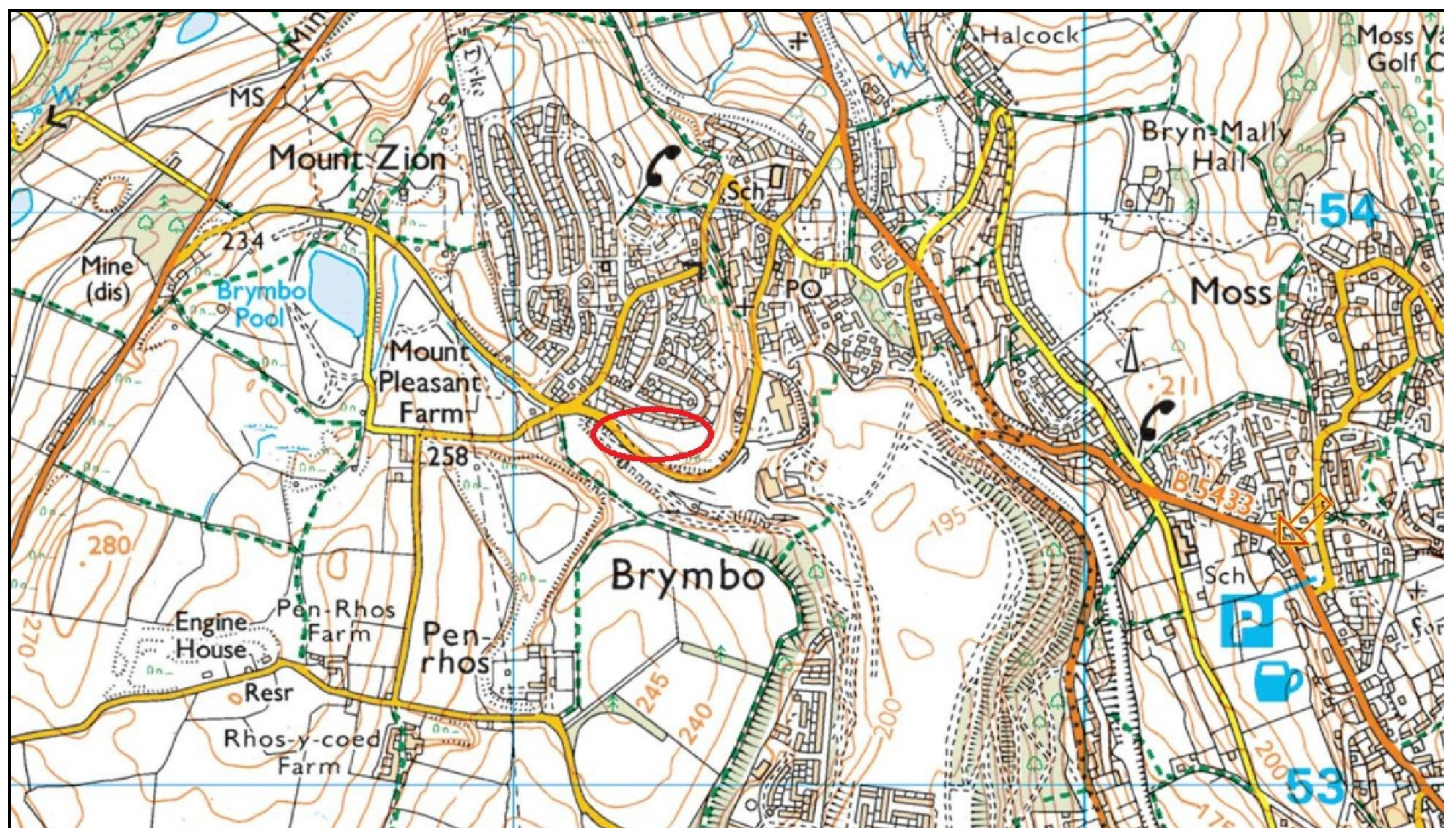


FIGURE 2: AERIAL PHOTOGRAPH



FIGURE 3: COFNOD DATA KEY SITES AND SPECIES WITHIN ONE KM

