

**ECOLOGICAL REPORT AND RISK
ASSESSMENT FOR THE
PROPOSED DEVELOPMENT
IN THE GROUNDS TO THE REAR OF
64 FRONT STREET
EAST BOLDEN**

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1. INTRODUCTION

- 1.1 These surveys and report were commissioned by Fitz Architects in February 2015 in relation to the proposal to build in the grounds to the rear of a large house at 64 Front Street, East Bolden. This garden is presently unmanaged.

The aims of the study were as follows:-

1. To carry out an extended Phase 1 habitat survey of the site that is to be developed and to identify any areas of ecological interest.

2. To outline ways in which the proposed development can maintain and enhance the ecological value of the area to be developed.

- 1.2 The survey covered only the garden. The buildings on the site have been the subject of earlier surveys relating to earlier planning applications.

Site Description (See Photos)

- 1.3 The site is a roughly rectangular plot bounded by the buildings to the south and by a mixture of stone and brick walls on the other boundaries. There is an old unused greenhouse in the north-east corner of the garden.
- 1.4 The property is bounded to the south by a very busy road and by a small back road to the north. There are other properties to the east and west so the site is isolated from any areas of natural habitat.



From site looking north (the trees are outside the site)



Looking north showing old greenhouse



Looking south



Shrub cover at south-west end of garden

2.1 POLICY CONSIDERATIONS

2.1.1 The most pertinent consideration is the legislation laid down in the Wildlife and Countryside Act (1981) (Amended 1985). This Act allows for the designation by the relevant statutory agency, in this case English Nature, of National Nature Reserves (NNRs) and Sites of Special Scientific Interest (SSSIs).

These sites are designated because of their special botanical, zoological, geological or physiographic interest. The Act also provides protection to those plant and animal species listed in the Schedules of the Act.

2.1.2 European legislation is also pertinent, since it places certain obligations on the member states. The Habitats Directive (92/43/EEC) - The Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. This Directive is designed to schedule important wildlife sites through the EC as Special Areas of Conservation (SACs). It gives protection to specific habitat types and species listed as being under threat.

2.1.3 In addition to statutory designations, a site may be categorised by a local conservation organisation, usually the County Wildlife Trust as a Site of Nature Conservation Importance (SNCI). This non-statutory designation applies to sites which are too small for SSSI status or fall just below the other ecological criteria used for SSSI designation. The ecological value of such sites is generally recognised by local authorities.

2.1.4 Most local authorities have produced a Biodiversity Action Plan for the county or region which identifies locally significant habitats and species for which action plans have been or will be prepared, these include the Durham

Biodiversity Action Plan. Any development should seek to minimise the impact on all habitats and species, with special regard for those identified in this Plan.

2.2 THE LAW RELATING TO PROTECTED SPECIES

2.2.1 BATS

All bats in Britain are protected by law. Under the 1981 Wildlife and Countryside Act and the Conservation (Natural Habitats) Regulation 1994, (Directive 92/43/EEC) it is illegal to :-

- * catch, injure, kill or sell any bat
- * damage, destroy or obstruct bat roosts (even when bats are not present)
- * disturb bats while they are roosting, for example by entering known roosts or hibernation sites.

A breeding site or resting site of any bat is known as a bat roost. A bat roost is any structure as bat use for shelter or protection. It is an offence to damage or destroy a bat roost at any time of year.

The following activities are those most likely to cause disturbance to bat roosts:-

- * Demolition of buildings
- * Restoration, building conversion or remedial work including re-roofing, repointing of stonework.
- * Timber treatment.
- * Tree felling or extensive tree surgery.

Some of the disturbance problems may be overcome by avoiding the time of year when the bats are in residence. This is mainly during the breeding season April to late September.

2.2.2 BADGERS

Badgers are protected by a series of legislation - The Badgers Act 1973 and the Protection of Badgers Act 1992, plus amendments to the Wildlife and Countryside Act 1981.

Under these laws it is illegal to :-

- * wilfully kill, injure, take, possess or cruelly ill-treat a badger, or attempt to do so.
- * intentionally or recklessly interfere with a badger sett, this includes disturbing badgers in a sett, damaging a sett or obstructing access. (A sett is defined as 'any structure or place which displays signs indicating current use by a badger').

2.2.3 BIRDS

Under the Wildlife and Countryside Act (1981) it is illegal to:-

- * Kill, injure or take any wild bird (unless under licence)
- * Take, damage, or destroy a bird's nest whilst in use or being built.
- * Take or destroy the egg of any wild bird.

* Disturb any wild bird listed on Schedule 1 of the Act while it is nest building or at a nest containing eggs or young, or disturb the dependant young of such a bird.

2.3 METHODOLOGY

- 2.3.1 The habitats present were mapped using the Phase 1 Habitat Survey methodology. This is a standardised system for classifying and mapping wildlife habitats in Great Britain. The full methodology is set out in the 'Handbook for Phase 1 Habitat Survey', JNCC, 2003.
- 2.3.2 The area was assessed as possible habitat for protected species in particular bats, badgers and breeding birds.

Bats

This report applies only to the garden and there are no trees in the garden and the only building is a greenhouse. The stone walls on the site boundaries were assessed and the garden was assessed as potential bat feeding habitat.

Badgers

The area was surveyed for signs of badger including setts, latrine sites, feeding areas and badger paths. The site was assessed for its suitability as badger habitat.

Since badgers are known to use latrine sites, feeding areas and certain routes on a regular basis such signs are easy to identify. Badgers setts remain in use for many years and these can be identified as 'active' by the presence of footprints, recently excavated soil and discarded bedding.

Birds

The small area of evergreen shrubs at the south end of the site and a small dense area of bramble scrub were checked for the presence of old nests. The stone walls were also assessed.

2.4 RESULTS OF SITE ASSESSMENT

Habitats

- 2.4.1 With the exception of a small group of low shrubs in the south-west corner the whole site supports a mixture of garden plants and invasive ruderals. The main ruderal species recorded were rosebay willowherb (*Chamerion angustifolium*), sting nettle (*Urtica dioica*) and creeping thistle (*Cirsium arvense*). There is a small area dominated by bramble scrub on the south side of the greenhouse.
- 2.4.2 Some of the stone walls on the site boundary have small amounts of ivy growing over them and there are shallow gaps in the stone work that could provide habitat for invertebrates.
- 2.4.3 There is a small low area of ornamental evergreen shrub in the south-west corner.

Protected Species

- 2.4.3 **Bats** - There are no buildings in the garden except a greenhouse and the stone boundary walls were assessed as unsuitable for bat use as they are reasonably low and there were no deep crevices. There are no trees within the site that could serve as bat roost sites and its use as bat feeding habitat is limited because of the lack of tall vegetation with the exception of one tree that overhangs the garden at the southern end. No potential bat roost sites were found in this tree.
- 2.4.4 **Badgers** – The garden is totally unsuitable for badger use. It is isolated from areas of natural habitat and is surrounded by roads and housing.
- 2.4.5 **Breeding Birds** – There was no evidence of birds nesting on the site. The shrubs in the south-west corner and the small area of bramble scrub could potentially be used by nesting birds. There are no holes in the boundary walls that could serve as nest sites for hole-nesting species and any ivy cover is too thin to provide nest sites. There is a high level of human disturbance in the area as building work is ongoing on the house and outbuilding to the south of the garden
- 2.3.6 **Amphibians** – There are no ponds in the old garden and the site is surrounded by roads and walls so there is no access to the site for amphibians.

3. ECOLOGICAL EVALUATION OF SITE

3.1.1 Approach to Ecological Evaluation

A guideline approach for assessing the value of ecological features and sites has been published by the Institute of Ecology and Environmental Management (IEEM). This approach has been adopted when assessing the site.

The assessment is based on assigning a level of geographical importance to ecological features. Six levels of geographical importance are included in the IEEM guidelines and these are summarised as follows:-

Table 1

Level of Value	Examples
International	<ul style="list-style-type: none">* Internationally designated sites or candidate sites. (e.g. SPA, pSPA, SAC, pSAC, RAMSAR)* A viable area of habitat listed in Annex 1 of the Habitats Directive.* A site supporting internationally important species, which is threatened or rare in Britain.* A nationally significant population/number of a internationally important species.
National	<ul style="list-style-type: none">* Nationally designated sites (SSSI, NNR, ASSI)* A viable area of priority habitat listed in the UK BAP* A regularly occurring population of a nationally important species which is threatened or rare.* A regularly occurring, regionally significant population/number of a nationally important species.* A feature identified as of critical importance in the UK BAP.
Regional	<ul style="list-style-type: none">* Viable areas of key habitat identified in the Regional BAP.* Viable areas of key habitat identified as being of regional value within a SNH Natural Heritage Zone.* A regularly occurring, locally significant population of a nationally scarce species which occurs in 16-100 10km squares in the UK or in a Regional BAP* A regularly occurring, locally significant number of a regionally important species.* Site which just fall short of the SSSI designation criteria but exceed SNCI (county level) designation
County/ Metropolitan	<ul style="list-style-type: none">* Semi-natural woodland >0.25ha* County/Metropolitan sites and other sites designated by the local authority including Local Nature Reserves.* A viable area of habitat listed in County BAP

* Any regularly occurring, locally significant population of a species listed in a County 'red data book' or BAP on account of its regional rarity or localisation.

District/Borough

- * Semi-natural woodland < 0.25ha
- * SSSI designated sites and sites designated by local authorities.
- * Sites/features that are scarce in the local area.
- * Viable areas of the habitats listed in the District/Local BAP.
- * A regularly occurring population of a species listed in a District/ Local BAP
- * A diverse and/or ecologically valuable hedgerow network

Parish/ Neighbourhood

- * Areas of habitat considered to appreciably enrich the habitat resources within the context of the Parish or Neighbourhood.
- * Local Nature Reserve selected on Parish ecological criteria

In this instance the Biodiversity Action Plan is the **Durham Biodiversity Action Plan**. This provides information on the local and regional occurrence of habitat types and key species and identifies those that are a priority for conservation in the South Tyneside area. The function of this document is to ensure that national targets for habitats and species identified in the UK Biodiversity Action Plan are met at a regional level by setting appropriate regional conservation targets.

3.2 Site Status

The ecological importance of the site can be assessed by reviewing the results of the field surveys against the criteria in Table 1.

Criterion	Comment	Level of Importance
Is the land included in a designated nature conservation site?	No	N/A
Does the site support habitats or species listed in the area BAP ?	No	N/A
Are there habitats present that enrich the habitat resource in the neighbourhood ?	Yes	Local
Does the site support any species in Schedules 5 or 8 of the Wildlife & Countryside Act.	No	N/A

3.3 Site Evaluation - Habitats

The site is an overgrown garden with little natural vegetation except ruderal species. Its main ecological value would be to invertebrates. As it is bounded by walls access is restricted for some species.

No species was recorded in the area of local, regional or national rarity. There is limited plant species diversity and most of the species present are not indigenous. No Durham BAP species or habitat was recorded on the site.

Overall the site has a very limited ecological value due to the limitations described above and because of the high level of human disturbance.

3.4 Site Evaluation – Protected Species

3.4.1 Bats

There are no potential roost or hibernation sites. The area may form a part of the foraging habitat for bats but there are few trees or tall shrubs in the area to provide good bat feeding habitat.

3.4.2 Badgers

The location of the site close to roads and housing, the isolation from natural habitat and the high level of human disturbance mean that the garden is unsuitable for badger use.

3.4.3 Birds

There is very limited potential for birds to nest within the site and the high level of traffic noise and human disturbance may preclude the use of the garden for nesting. It provides limited feeding habitat for some species.

3.4.4 Other protected species

There is no standing water on site that could support amphibians and no potential access as the garden is surrounded by high walls.

4 IMPACT ASSESSMENT

4.1 Habitats

The loss of the garden will mainly mean a loss of cultivated plants. This will mean a small decrease in the available nectar sources in the area for invertebrates.

4.2 Protected Species

Bats

There will be no direct impact on bats as there are no potential roost sites and the garden area is too small to add significantly to bat feeding habitat in the area.

Badgers

The site is in a built up area with a high level of disturbance so unsuitable for badger use.

Breeding Birds

There will be a very small loss of potential bird nesting habitat when the shrubs and small area of bramble scrub are removed.

Other species

There is no habitat suitable for use by other protected species and the site is isolated from other 'natural' areas of habitat by housing and busy roads. The boundary walls limit access to the garden for some species.

5. MITIGATION

- 5.1 As a precautionary measure all shrub and scrub removal will avoid the bird breeding season.
- 5.2 If it is necessary to consolidate any of the stone boundary walls, then some gaps and shallow crevices should be left for use by invertebrates
- 5.3 The new landscaping scheme should include flowering plant species that provide a good nectar source. (e.g. lavender, sage, bergamot, thyme)

