

# ASTUTE ECOLOGY

Ecological Consultants

## PRELIMINARY BAT ASSESSMENT

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17 CENTRAL AVENUE, WHITBURN, SUNDERLAND,  
SR6 7LB

Report Reference: AE20.192  
September 2020

<b>Client:</b>	Stephen Tate	
<b>Site:</b>	17 Central Avenue, Whitburn, Sunderland SR6 7LB	
<b>Grid Ref:</b>	NZ 40217 62027	
<b>Report Ref:</b>	AE20.192	
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# 1 Summary

Astute Ecology were commissioned by Stephen Tate to undertake a Preliminary Bat Assessment pertaining to a residential dwelling located at 17 Central Avenue, Whitburn, Sunderland SR6 7LB. The purpose of this assessment was to identify the suitability of the building to support bats, identify any evidence of bats having used or using the building, and to identify key ecological constraints to the proposed loft conversion. The survey was undertaken on the 22<sup>nd</sup> September 2020.

## Key Messages

- The building was assessed to have 'Negligible Potential' to support roosting bats. No evidence or signs of bats using or having used the internal or external features of the building was found during the assessment.
- Due to the unlikelihood for bats to be using the building for roosting, impacts to bats as a result of the proposed loft conversion are highly unlikely and no further surveys or mitigation are required.
- In the event, that breeding birds are found to be using the building on site, no work should be undertaken within 5m of the breeding bird nest and a 5m buffer shall be maintained until the young have fledged and the adult birds are no longer using the nests.
- It is an offence to intentionally kill, injure, or take any wild bird whilst nesting, or take, damage, or destroy the nest of any such bird while in use or being built.
- Recommended enhancements for bats and birds are given in section 5.

## 2 Introduction

- 2.1 Astute Ecology were commissioned by Stephen Tate to undertake a Preliminary Bat Assessment pertaining to a residential dwelling located at 17 Central Avenue, Whitburn, Sunderland SR6 7LB, herein referred to as the 'site'. The purpose of this assessment was to identify the suitability of the building to support bats, identify any evidence of bats having used or using the building, and to identify key ecological constraints to the proposed development. A breeding bird assessment was included as per standard industry guidelines.
- 2.2 The site features a semi-detached residential brick walled and tiles roof 2 storey building. The site the subject of a planning application for a loft conversion. No drawing plans have been provided.
- 2.3 The site is located within an urban area, is bounded by residential dwellings and associated gardens. Satellite imagery (Appendix 5) indicates agricultural land with hedgerows and tree lines located approximately 100m+ west of the site.
- 2.4 The legislation relevant to protected species within the United Kingdom is summarised within Appendix 2.
- 2.5 Results and recommendations contained within this report have been prepared by an experienced ecologist and are therefore the view of Astute Ecology. The survey is based on information provided by our client, the development proposals, and the results of the desk study and our survey of the site. This report pertains to this information only.

## 3 Methodology

### 3.1 Desk Study

Data regarding any known statutory or non-statutory sites in addition to any European Protected Species License (EPSL) application records within 2km of the site were searched for using The Multi-Agency Geographic Information for the Countryside (MAGIC Maps) on 29/09/2020.

### 3.2 Surveyors

Survey undertaken by Andrew Bird BSc. (Hons.) Senior Ecologist of Astute Ecology Ltd., Natural England WML-A34 - Level 2 Bat Licence Number:2018-37905-CLS-CLS.

### 3.3 Reporting

This report was prepared in accordance with the Chartered Institute of Ecology and Environmental Management; *Guidelines on Ecological Report Writing* CIEEM (2017).

### 3.4 Survey Conditions

The survey was undertaken at 12:00 on the 22<sup>nd</sup> September 2020.

The ambient temperature was recorded as 15°C, with 3/8 cloud cover, no rain, and good visibility.

### 3.5 Protected Species

#### 3.5.1 Roosting Bats

Structures on site were assessed for their suitability to support roosting bats in accordance with Collins (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, (3rd edition), Bat Conservation Trust, London. During the external and internal assessment of the structure, features including suitable enclosed spaces such as slipped or missing roof tiles, gaps and cracks in brickwork, enclosed roof voids, gaps along ridge rafters and joints in roof beams were assessed to evaluate the potential suitability of the structure to support roosting bats. Evidence of bat presence was also searched for including feeding remains, bat droppings and staining around potential access points. Bats often use different roosting sites at different times of the year, and the absence of evidence does not always equate to the absence, or lower suitability of a structure to support a bat roost. The potential suitability of each structure was categorised following Collins (2016), and the resulting survey effort to establish confidence in a result is summarised within Appendix 2.

### 3.5.2 **Foraging and Commuting bats**

Habitat features on site were assessed for their suitability to support foraging and commuting bat populations. This assessment was independent from the suitability of the site to support roosting bats and provides information on the likeness of bat foraging activity within the local environment, and the dependence of individuals on these features for commuting to alternative roosting sites, foraging and migration. The suitability of the sites commuting, and foraging habitat was assessed and evaluated against the proposed impacts to the site to allow categorisation of the habitat (See Appendix 2).

### 3.5.3 **Breeding Birds**

The building to be impacted from the proposed development was the subject of a search for evidence of breeding birds, active or previously used nests including the recording of any droppings, feathers, pellets (barn owl), down and chick remains. Following standard techniques, as recommended within Gilbert, Gibbons, and Evans (1998) *Bird Monitoring Methods: Breeding Bird Survey* (pages 389-393) and Shawyer (2011) *Barn Owl (Tyto alba) Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting*, IEEM, Winchester.

### 3.6 **Limitations**

It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. The protected and notable species assessment provides a preliminary view of the likelihood of these species occurring on site, based upon the suitability of the habitats, known distribution of the species in the local area and any direct evidence on site. It should not be taken as providing a full and definitive survey of any protected species group.

### 3.7 **Report Lifespan**

Given the transient nature of the subject we would consider the survey results contained to be accurate for 18 months.

## 4 Results

### 4.1 Desk Study Results

#### 4.1.1 Designated Sites

The MAGIC search revealed Three designated sites within a 2km radius of the site (Table 1). Maps provided by MAGIC are included within Appendix 3.

**Table 1.** Designated sites within 2km of the site

Name	Status	Reason for Status/Description	Distance from site
Durham Coast	SSSI	Rocky Shore, Bird Habitat	1.2km East
Cleadon Hill	SSSI	Fauna and Flora	1.8km North-west
Cleadon Hill	LNR	Fauna and Flora	1.8km North-west

#### 4.1.2 Species Records

MAGIC maps revealed a single record of bat European Protected Species Licence (EPSL) applications within 2km of the site (Appendix 3) for common pipistrelle (*Pipistrellus pipistrellus*) and dated 2012 located 1.8km east of the site.



## 4.2 Protected Species results

### 4.2.1 Roosting Bats

- Building 1 was assessed as Negligible potential to support roosting bats, Containing only low suitable Potential Roost Features (PRFs). An assessment of the buildings' features and inspection is described below. Associated photographs can be found within Section 4.3.

### 4.2.2 Bat Building Assessment

- **Building 1 = Negligible**
- **External Walls:** The brick built walls were in good condition, lacking cracks and crevices suitable as PRFs. The soffits were well-sealed on all elevations. No actual evidence or signs of bats were recorded on the external walls.
- **External Roof:** The slate tiled roofs were in good condition, lacking suitable gaps within the tiles and ridge tiles. Minor cracks were noted on the western ridge tiles but did not lead to a sheltered void suitable as a PRF. The mortar in the roof verges featured minor cracks considered unsuitable as a PRF. No actual evidence or signs of bats was recorded on the external roofs.
- **Loft Space:** The interior roof featured felt lining in good condition, free of any tears and cracks of light denoting access points. No actual evidence or signs of bats was recorded within the loft.

### 4.2.2 Foraging and Commuting Habitat for Bats

The building was bounded by a residential dwellings with associated gardens. The local area is likely to offer low potential for low number of foraging and commuting bats.

### 4.2.3 Breeding Birds

The building was assessed to have low potential to support nesting birds. No evidence of nesting birds was found during the assessment.

### 4.3 Site Photographs

<p><b>Eastern Elevation</b></p>	
<p><b>Southern Elevation</b></p>	
<p><b>Southern Elevation</b></p>	

<p><b>Southern Elevation</b></p>	
<p><b>Western Elevation</b></p>	
<p><b>Western Elevation</b></p>	



## 5 Evaluation and Recommendations

### 5.1 Desk Study Impacts

The proposed development site is not designated for its wildlife interest at an international, national, or local level. There will be no impacts to designated sites as a result of the proposed development due to the works being contained within the site boundaries.

### 5.2 Roosting bats

#### 5.2.1 Impacts

- The building to be impacted during the proposed application was assessed to be of negligible potential for roosting bats. Therefore, the proposed loft conversion is highly unlikely to negatively impact upon bats and their roosts.
- A Natural England bat development licence is not required for the development works to proceed.

#### 5.2.2 Recommendations for site enhancement

- The provision of at least 1x artificial bat boxes/bricks/tube placed high up on the south/eastern elevation on a site building/tree post works would provide enhanced roosting opportunities for potential bats within the local area.
- In the unlikely event any evidence of bats is found at any point during the development, work must stop immediately, and advice sought from Natural England or a professional bat ecologist.

### 5.3 Foraging and Commuting Bats

#### 5.3.1 Impacts

- There will be no direct loss of bat foraging and commuting habitat, and no new external lighting is proposed. There a result of the proposed works, and therefore no direct impacts upon foraging and commuting bats.

#### 5.3.2 Recommendations

- None required.

### 5.4 Breeding Birds

#### 5.4.1 Impacts

- Without precautions, there is a risk of negative impacts such as disturbance, injury, or death to nesting birds and their young during the proposed development.



#### 5.4.2 Recommendations

- If proposed works are to be undertaken during the breeding bird season (March to August inclusive), then they should be preceded by a check for nesting birds (within 24 hours prior to commencement of works) to avoid infringing legislation which protects all nesting birds.
  
- In the event, that breeding birds are found to be using the building or habitats on site, no work should be undertaken within 5m of the breeding bird nest and a 5m buffer shall be maintained until the young have fledged and the adult birds are no longer using the nests.
  
- All wild birds, their eggs and nests are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure, or take any wild bird whilst nesting, or take, damage or destroy the nest of any such bird while in use or being built.
  
- The provision of at least 1x Generalist Schwegler 1B nest boxes (with a 32mm entrance) would have a positive effect on nesting birds at the site.
  - Generalist bird boxes should be fixed two to five metres high, out of the reach of predators such as domestic cats.
  - Boxes are best mounted facing between north and east, thus avoiding strong sunlight and the wettest winds.
  - Boxes should also be tilted forward slightly to minimise the effect of any driving rain.

## Appendix 1. References

- Bat Conservation Trust's 'Good Practice Survey Guidelines' (Rev 2012).
- Bell, S. McGillivray, D. (2006) *Environmental Law*. 6<sup>th</sup> ed. Oxford University Press.
- Byron, H (2000) *Biodiversity and Environmental Impact Assessment: A Good Practice Guide for Road Schemes*. The RSPB, WWF-UK, English Nature and the Wildlife Trusts, Sandy.
- CIEEM (2017) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester
- Collins, J (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, (3<sup>rd</sup> edition), Bat Conservation Trust, London
- Gilbert G, Gibbons DW, Evans J. (1998) *Bird Monitoring Methods: Breeding Bird Survey* (pages 389-393). RSPB.
- Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*.
- Mitchell-Jones A.J. McLeish, A.P. (2004) *Bat Workers Manual* (3<sup>rd</sup> Edition). Joint Nature Conservation Committee.
- Mitchell-Jones A.J. *Bat Mitigation Guidelines* 2004. English Nature.
- Sutherland, W.J. (1996) *Ecological Census Techniques*. Cambridge University Press.
- Treweek, J. (1999) *Ecological Impact Assessment*. Blackwell Science.
- Williams, C. (2010) *Biodiversity for Low and Zero Carbon Buildings, A Technical Guide for New Build*. Riba Publishing.

## Appendix 2. Legislation, Guidance and Methodology

### Roosting Bats

All bats in the United Kingdom and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species Regulations 2010 (as amended).

It is an offence to damage or destroy any bat roost, intentionally or recklessly obstruct a bat roost, deliberately, intentionally or recklessly disturb a bat or intentionally kill, injure or take any bat.

Areas of concern; can be encountered in many types of structure and care should therefore be taken when undertaking maintenance or demolition of suitable structures and trees.

Site assessments of buildings, commuting and foraging habitat and trees are undertaken in accordance with:

Collins (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, (3<sup>rd</sup> edition), Bat Conservation Trust, London.

Preliminary Ecological Surveys look for evidence of bat presence such as feeding remains, bat droppings, roosting individuals and staining around potential access points.

The suitability of site features was also assessed because absence of bat evidence, is not confirmation of a negative result. Within buildings these features include suitable enclosed spaces such as slipped or missing roof tiles, gaps and cracks in brickwork, enclosed roof voids, accessibility into wall spaces, gaps along ridge rafters, joints in roof beams and the presence of suitable soffits and fascia's.

Within tree features searched for include; natural holes, woodpecker holes, cracks/splits in major limbs, loose bark, hollows, and dense cover of ivy over the tree.

If evidence is found, or a building supports features conducive to supporting roosting bats then further presence / absence bat surveys and/or roost characterisation surveys are recommended.

The following tables are only to be used as a basic indication as to how potential is judged. They are not to be used as a complete definitive source of guidance. The final result is based upon the surveyor's professional opinion, experience and knowledge from various in depth sources.

Category	Description of roosting habitat	Number of presence / absence surveys required
<b>No Potential</b>	The building is wholly unsuitable for a bat roost.	None
<b>Negligible Potential</b>	Suitable cavities may exist but these are open to wind, rain or disturbance.	None
<b>Low Potential</b>	This category describes a structure with one or more potential roost sites that could be used by individual bats opportunistically, that less than ideal in some way. For example, the feature may be subject to intermittent disturbance, and does not provide enough shelter, conditions* space and/or suitable surrounding habitat (e.g. unlikely to support a maternity or hibernation roost).	One survey between May and August



	This category described a tree of sufficient size and age to support roosting bats, but with no features observed from the ground, or the features only have a limited potential to support roosting bats.	Trees – No further surveys required
<b>Moderate Potential</b>	<p>This category describes a structure or tree considered to have one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions* and surrounding habitat but are unlikely to support a roost of high conservation status (With regard to roost type only – assessments are made irrespective of species conservation status, which is established after presence is confirmed)</p> <p>Features considered to have adequate potential would include cavities of appropriate dimensions that are generally free from disturbance and free from fluctuations in the weather.</p>	<p>Two surveys between May and September (with at least one survey undertaken between May and August)</p> <p>One Dusk emergence and One Dawn re-entry survey to be ideally undertaken at least two weeks apart.</p>
<b>High Potential</b>	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions* and surrounding habitat.	<p>Three surveys between May and September (with at least two surveys undertaken between May and August)</p> <p>One Dusk emergence and One Dawn re-entry survey to be undertaken. The third survey can be either Dusk or Dawn.</p> <p>The surveys should ideally be undertaken at least two weeks apart.</p>
<b>Confirmed</b>	This category is where positive evidence of bats has been recorded. For example, bats are found; bat droppings may be present at a suitable location for roosting bats; existing bat records may be associated with the structure.	<p>Three surveys between May and September (with at least two surveys undertaken between May and August)</p> <p>One Dusk emergence and One Dawn re-entry survey to be undertaken. The third survey can be either Dusk or Dawn.</p> <p>The surveys should be undertaken at least two weeks apart.</p>

If bats are discovered emerging or re-entering any structure, the survey schedule should be appropriately adjusted to increase the survey effort so that sufficient information for roost characterisation can be collected to advise the planning application or EPS development license.

### Foraging and Commuting bats

Habitat features on site were assessed for their suitability to support foraging and commuting bat populations. This assessment was independent from the suitability of the site to support roosting bats, and provides information on the likeness of bat foraging activity within the local environment, and the dependence of individuals on these features for commuting to alternative roosting sites, foraging and migration.

Potential suitability of foraging and commuting habitat within an application boundary. Features should be assessed following this guide and professional judgement. Adapted from Collins (2016). The following tables are only to be used as a basic indication as to how potential is judged. They are not to be used as a complete definitive source of guidance. The final result is based upon the surveyors' professional opinion, experience and knowledge from various in-depth sources.

Category	Description of commuting and foraging habitat	Survey effort to establish the value of commuting and foraging habitat**
<b>Negligible Potential</b>	Negligible habitat features on site likely to be used by commuting or foraging bats.	None
<b>Low Potential</b>	<p>Habitat which could be used by low numbers of commuting bats such as an isolated hedgerow with gaps, or an unvegetated stream unconnected to suitable habitat in the wider environment.</p> <p>Suitable, yet isolated habitat that could be used by foraging bats such as individual trees, or a patch of scrub.</p>	<p><b>Transect /spot count/ timed search survey:</b> One survey visit per season: Spring- April/ May Summer- June/July/ Aug Autumn – Sept/ Oct In weather conditions conducive to finding bats</p> <p><b>AND</b></p> <p><b>Static automated surveys:</b> One location per transect, over a five-night period, per season: Spring- April/ May Summer- June/July/ Aug Autumn – Sept/ Oct In weather conditions conducive to finding bats</p> <p><i>Further surveys may be required if surveys reveal higher activity than predicted from habitat alone</i></p>
<b>Moderate Potential</b>	<p>Continuous habitat connected to the wider landscape that could be used by commuting bats, notably tree lines, hedgerows or linked back gardens.</p> <p>Habitat that is connected to the wider landscape which could be used by bats for foraging such as trees, open water, scrub or grassland.</p>	<p><b>Transect /spot count/ timed search survey</b></p> <p>One survey visit per month (April to October) In weather conditions conducive to finding bats</p> <p>At least one survey should comprise dusk and pre-dawn (or dusk to dawn) within one 24-hour period.</p>

		<p><b>AND</b></p> <p><b>Static automated surveys:</b> Two locations per transect, over a five-night period, per month (April to October) In weather conditions conducive to finding bats</p>
<b>High Potential</b>	<p>Continuous, High-quality habitat that is well connected to the wider landscape which is considered to be highly conducive to commuting bats including river valleys, stream, hedgerows, and woodland edge</p> <p>High-quality habitat that is well connected to the wider landscape, that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourses, and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>	<p>Transect /spot count/ timed search survey Up to two survey visit per month (April to October) In weather conditions conducive to finding bats</p> <p>At least one survey should comprise dusk and pre-dawn (or dusk to dawn) within one 24-hour period.</p> <p><b>AND</b></p> <p><b>Static automated surveys:</b> Three locations per transect, over a five-night period, per month (April to October) In weather conditions conducive to finding bats</p>

### Breeding Birds

All nesting birds are protected under the Wildlife and Countryside Act 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition, for species listed on Schedule 1 of the Wildlife and Countryside Act 1981 it is an offence to intentionally or recklessly cause disturbance at, on or near an 'active' nest.

The bird breeding season is typically accepted to start in February and continue through until August, however breeding birds can be found all year round depending on the given species and climatic conditions.

A sites' habitat composition, locality, association to designated sites as well as current usage and management are all considered in the decision as to whether further bird-related surveys are required. In addition, surveys may be recommended based on incidental bird records collected during a Preliminary Ecological Appraisal, species identified within an ecological data search or target species listed within a local biodiversity action plan.

Bird surveys are carried out in accordance with:  
Gilbert, Gibbons, and Evans (1998) *Bird Monitoring Methods*, RSPB.

Barn Owls are included in Schedule 1 of the Wildlife & Countryside Act 1981 which affords them protection against disturbance whilst nesting. Specifically, under Part 1, Section 1 (5) it is an offence to intentionally or recklessly:

- Disturb any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young.
- Disturb dependent young of such a bird.

### **Ecological Enhancement**

In March 2012 the Department for Communities and Local Government published the National Planning Policy Framework. This sets out planning policies on protection of biodiversity through the planning system. The document states - *opportunities to incorporate biodiversity in and around developments should be encouraged.*

Usually when reviewing how ecological enhancements can be implemented the Local Biodiversity Action Plan for the area is considered.

For new buildings guidance such as in the following will be used:

Williams (2010) *Biodiversity for Low and Zero Carbon Buildings, A Technical Guide for New Build*, Riba Publishing.

### **Designated Protected Areas**

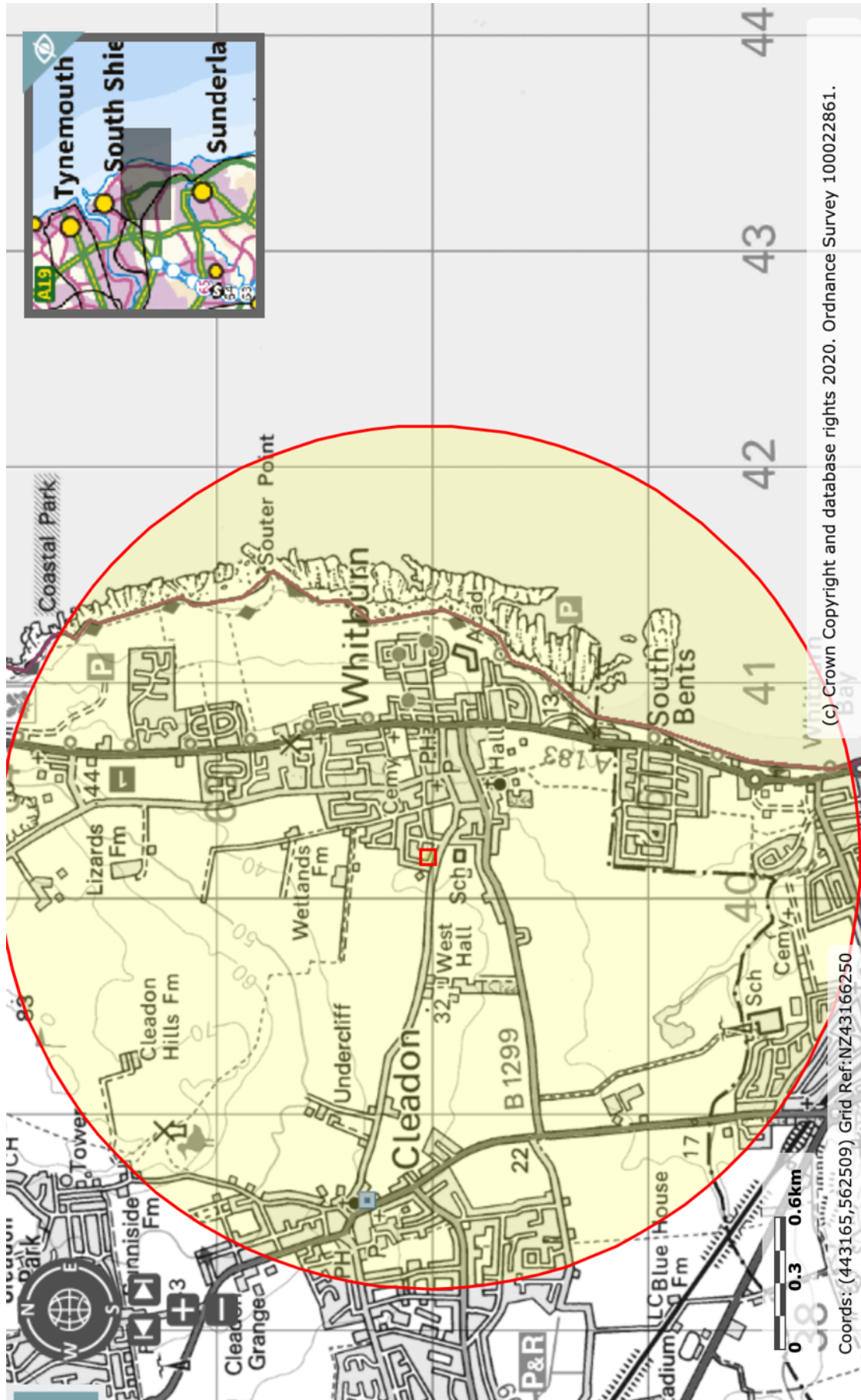
Designated areas are Sites of Special Scientific Interest (SSSI) while others have been designated as having European protection status. Local authorities can also designate areas for nature conservation and in doing so may impose local authority byelaws to support local nature conservation objectives.

European designated status includes Special Protection Areas (SPAs) that preserve areas for birds and Special Areas of Conservation (SACs) which provides protection for habitats and the species which these habitats supports. Laws stipulate that SSSIs, SPAs and SACs have to be maintained in a 'favourable condition' which requires efforts to preventing any potential impacts to these sites.

Information of Designated Protected Areas is received through Ecological Data Searches and Magic Map searches.

## Appendix 3. MAGIC Maps







## Site Check Results

Site Check Report Report generated on Tue Sep 29 2020  
**You selected the location:** Centroid Grid Ref: NZ38606231  
The following features have been found in your search area:

### Granted European Protected Species Applications (England)

<b>Case reference of granted application</b>	EPSM2012-4608
<b>Species group to which licence relates</b>	Bat
<b>Species on the licence</b>	C-PIP
<b>Site county of licence</b>	Tyne & Wear
<b>Licence Start Date</b>	09/08/2012
<b>Licence End Date</b>	31/03/2014
<b>Does licence impact on a breeding site</b>	N
<b>Does licence allow damage of breeding site</b>	
<b>Does licence allow damage of a resting place</b>	
<b>Does licence allow destruction of breeding site</b>	N
<b>Does licence allow destruction of a resting place</b>	Y
<b>Does licence impact on a hibernation site</b>	Unknown
<b>NERC agreement reference</b>	Unknown

## Appendix 4. Existing and Proposed Plans

None Provided



## Appendix 5. Site Location

