absolute ecology LLP wildlife surveys

Preliminary Roost Assessment for Bats & Birds

Location: Lightoaks, Cheadle Road, Oakamoor

Author: James Porter

Date: 15/03/2014

Notice to Readers

This report has been prepared by Absolute Ecology LLP with all reasonable skill, care and diligence, within the terms of the contract with the client. The actions of the surveyor on site and during the production of the report were undertaken in accordance with the Code of Professional Conduct for the chartered Institute of Ecology and Environmental Management (www.cieem.org.uk).

Executive Summary

Absolute Ecology LLP was commissioned to undertake a Preliminary Roost Assessment for the bat roost potential at a site known as Lightoaks, Cheadle Road, Oakamoor, ST10 3AN.

Building A showed limiting potential due to the lack of roosting opportunities and environmental variables, from this evidence it is concluded that Building A can be redeveloped as planned.

It is understood that plans for Building C do not include works to either the interior or exterior of the roof, nor do they include works within the roof void. It is therefore concluded that Building C can be redeveloped as planned.

No redundant bird nests were identified in buildings A or C, therefore no impact is envisaged for redevelopment of these buildings.

Building B will be going under a separate planning application, therefore not constraining the above buildings' planning application. Building B showed both potential for roosting bats and evidence of use by bats. Under the recommendations it is considered that further surveys will be required before a planning application can be made on Building B.

A redundant bird nest was identified in building B. Nesting birds may be present in this building during the bird breeding season (March to August inclusive). Any future works on this building should either take place outside of this period, or a suitably qualified ecologist brought onto site in order to supervise works and advise accordingly.

Contents

1. Introduction

1.1. Site Description

Absolute Ecology was commissioned to undertake a Preliminary Roost Assessment for the bat roost potential at a site known as Lightoaks, Cheadle Road, Oakamoor, ST10 3AN. The site comprises of three outbuildings, previously used as barns. The buildings are two-storey brick structures. They have timber-framed roofs, with slate tiles and no inner lining. The site is part of a collection of buildings within a largely agricultural landscape. The immediate surroundings contain extensive gardens, tree lined roads and areas of trees; and there are nearby woods in all directions. There are watercourses roughly 300m west, 500m north and 600m east of the site, with a pond 350m to the northeast.

1.2. Proposed Works

1.3. Best Practice Guidance

The scope of this appraisal has been determined in line with the proportional approach to ecological survey, assessment and subsequent recommendations for avoidance and mitigation of impacts, which is encouraged in the emerging 'BS 42020: Biodiversity – Code of practice for planning and development'. This report has been prepared with du consideration for various best-practice guidance and methodologies including those of the Chartered Institute of Ecology and Environmental Management (CIEEM (2012)1, the emerging BS 42020 and the Bat Conservation Trust Best Practice 2012.

1.4. Aims of the Survey

1.3.1 The aims of the Preliminary Roost Assessment is to provide an ecological evaluation of the following species within the proposed application area:

Bats
• Probability of bats and their roost sites being present at the proposed re/development site.
• To assess the roost status.
• To assess suitable food resources and habitat requirements.
• If a roost site is found, to provide an impact assessment.

Table 1. Aims of survey in relation to bats.

1.3.2 A bat roost is interpreted as 'any structure or place, which any wild bat uses for shelter or protection'. Bats tend to show a high fidelity to roosts. Subsequently, legal opinion regards a roost to be protected whether or not the bats are present at the time. There are many types of roost used by temperate bats during their annual cycle: Any structures found having evidence

of bats will be further evaluated to assess which of the following roost categories may be present onsite (if any):

Status	Description
Maternity / Nursery Roost	*used by breeding bats, where pups are born and raised to independence (Anecdotal evidence may support this prospect despite sub-optimal survey period).*
Hibernation Site	*where bats may be found during the winter. (This is assessed within the context of this report).*
Daytime Summer Roost	*used by males and/or non-breeding females (Seasonal limitations prevent robust analysis of this).*
Night Roost	*where bats rest between feeding bouts during the night but are rarely present during the day.*
Feeding Roost	*where bats temporarily utilize feeding perches and stations to eat an item of prey.*
Transitional (or Swarming) Site	*where bats may be present during the spring or autumn (This can not be assessed within the context of this report).*

Table 2. Bat roost status definitions

Birds
• Establish if birds are using the site.
• Locate nest sites, if present.
• Assess what types of activities were shown within the redevelopment site.
• Assess suitable food resources and habitat requirements.
• Provide an impact assessment, if nests are found.

Table 3. Aims of survey in relation to birds.

Barn Owl (*Tyto alba)*
• Establish presence onsite.
• Establish potential nest sites (PNS).
• Locate any active roost sites (ARS).
• Locate any temporary roost sites (TRS)
• Assess potential feeding and dispersal habitats (PFH)
• Provide an impact assessment, should barn owl(s) be present

Table 4. Aims of survey in relation to Barn Owl.

1.3.2 Assessment also considers potential effects on valued ecological receptors (VERs) and zones of influence (ZoI) during pre and post development, both onsite and off- site. The term Zone of Influence is used to describe the geographic extent of potential impacts of a proposed development. Should a likely significance of negative impacts be identified, further surveys,

mitigation and enhancement measures will then be determined accordingly; to prevent, offset or reduce the degree of impact that may occur should development commence.

1.3.3 Should bats be present, or evidence of bats identified onsite, or that constraints are identified during the Preliminary Roost Assessment, then further survey would be required. If bats are identified then a European Protected Species (EPS) development license issued by Natural England (NE) may be required prior to any works taking place. If required, further presence/absence survey should be undertaken and a mitigation strategy be implemented with Natural England and the Local Planning Authority. Should no further surveying effort be considered, then the PEA report will include full justification and evaluation.

2. Methods

2.1. Summary of Survey Methods

All bat species resident in the UK have been recorded using trees, buildings and built structures, e.g. bridges, at some time during the year (Bat Conservation Trust, 2007 2nd edition 2012). The buildings were inspected externally and internally, where access was available, for signs of bat activity. These typically include bat presence, droppings, feeding remains, urine stains and grease marks. Notes were made on the following in accordance with the guidelines published by the BCT (2007 2nd edition 2012) for the surveying of buildings and built structures:

- Type and age of building
- Type of construction
- Presence of potential roost features, e.g. hanging tiles, raised tiles, roof voids
- Information or evidence of work having been undertaken that could affect use of the structure by bats
- Amount and location of evidence of bats such as presence of live or dead bats, droppings, grease marks, urine stains, characteristic smell of bats.

In the absence of any evidence, trees and structures have been assigned a rating of suitability from negligible to high potential for supporting bats. The rating is based on the location of the structure in the surrounding landscape, the number and type of features suitable for use by bats and the surveyor's experience. For example, a structure with a high level of regular disturbance and few opportunities for access by bats that is in a highly urbanised area with few or no mature trees, parkland, woodland or wetland would have negligible potential. Conversely, a pre-20th-century or early 20th-century building with many features suitable for use by bats close to good foraging habitat would have high potential.

2.2. Pre-Survey Data Search

Ecological data searches supplied by Staffordshite Ecological Record (SER) were acquired to establish whether any notable, protected bat or bird species have been recorded within a 2 km radius of the proposed development area. Furthermore, a desktop study of the area using online resources was undertaken independently to corroborate the current overview of the site and its importance in the landscape. A number of electronic sources were consulted, including www.magic.gov.uk, www.naturalengland.org.uk and Google Earth.

2.3. Surveyor Information

Surveyor 1

James Porter – BSc(Hons), MSc, MIEEM, Natural England Bat Survey Class Licence CL17, Registration Number CLS03122. James is an ecologist with four years' experience of environmental consultancy work. He holds a BSc (Hons) in Ecology and an MSc in Behavioural Ecology. James is an experienced bat surveyor with competency in activity surveys, dawn and dusk bat roost assessments, daytime surveys for bat field signs, assessments of trees as potential bat roosts and the production of reports providing advice on best practice, mitigation and compensation works relating to bats as may be required. James holds a Natural England and Countryside Council for Wales licence, since 2013, to disturb bats for the purposes of science and education or conservation and has worked under Development Licences to permit development works affecting bats. James has been an active bat group worker with the Birmingham & Black Country Bat Group since 2010. He also works alongside the Bat Conservation Trust with various projects such as the National Bat Monitoring Project, and is a member of the Bat Conservation Trust.

2.4 Field Surveys

2.4.1. Habitat Survey

The habitats on-site and in the surrounding landscape were assessed for their potential to support bat and bird species.

2.4.2. Roost Surveys

Equipment used to aid the survey included low and high-powered torches, ladders and binoculars.

A preliminary bat and bird roost assessment of the buildings and structures was undertaken on 13th March 2014. Such scoping exercises can be undertaken throughout the year. Other than when assessing trees, environmental factors such as the weather do not have an impact upon the overall assessment survey results.

The survey focused predominantly on the buildings for redevelopment under the current planning application. It is understood that all trees on site are intended to be retained within the application area, and so were not individually assessed. The external inspection incorporated visual assessment with the use of binoculars, torch and ladders in full daylight to ascertain the following:

- Condition of roof, i.e. missing or raised roof tiles.
- Condition of windows and doors, i.e. broken panes.
- Potential ingression points around ridges and apex of the buildings.

- Any anecdotal evidence of bats, i.e. droppings, grease marks, feeding remains.
- Any evidence of birds, i.e. nest material, droppings.

The external inspection incorporated visual assessment with the use of torch, endoscope and ladders to ascertain the following:

- Any potential internal roost features, i.e. non-illuminated areas, joints, crevices, beams and cavities.
- To locate potential roost/nest sites.
- To listen for any bats and birds.
- To examine floors, walls and structural elements for anecdotal evidence, i.e. droppings, urine stains, corpses and feeding remains.

In the absence of any evidence, structures have been assigned a rating of suitability from negligible to high potential for supporting bats. The rating is based on the location of the structure in the surrounding landscape, the number and type of features suitable for use by bats and the surveyor's experience. For example, a structure with a high level of regular disturbance and few opportunities for access by bats that is in a highly urbanised area with few or no mature trees, parkland, woodland or wetland would have negligible potential.

Conversely, a pre-20th-century or early 20th-century building with many features suitable for use by bats close to good foraging habitat would have high potential.

3. Results

3.1. Pre-Survey Data Search

3.1.1. Designated Sites

Desk-top study of the area revealed that there are no protected sites within the immediate vicinity but that there are three Sites of Special Scientific Interest (SSSI) within 2km; Dimmingsdale & The Ranger SSSI approx. 900m to the south, Whiston Eaves SSSI approx. 1.7km to the northeast, and Bath Pasture SSSI approx. 2km to the northwest.

3.1.2. Protected Species.

Seven British bat species are currently given UK BAP (2007) Priority Species Status: Eleven of the seventeen resident UK bat species occur in Staffordshire. Staffordshire Ecological Records show two UK BAP species being recorded within 2km of the proposed application area.

UKBAP	Common name	Species	Recorded within 2km
☑	Brown long-eared bat	*Plecotus auritus*	☑
☑	Barbastelle bat	*Barbastella barbastellus*	☒
☑	Bechstein's bat	*Myotis bechsteinii*	☒
☑	Noctule	*Nyctalus noctula*	☒
☑	Greater horseshoe bat	*Rhinolophus ferrumequinum*	☒
☑	Lesser horseshoe bat	*Rhinolophus hipposideros*	☒
☑	Soprano pipistrelle	*Pipistrellus pygmaeus*	☑

UKBAP Bat species recorded within Staffordshire.

A further five/six bat species that are not currently given UK BAP consideration are also recorded within 2km of the proposed application area.

UKBAP	Common name	Species	Recorded within 2km
☒	Natterer's bat	*Myotis Nattereri*	☑
☒	Daubenton's bat	*Myotis daubentonii*	☑
☒	Whiskered/ brandt bat	*Myotis mystacinus/brandtii*	☑
☒	Serotine (Lesser Noctule)	*Nyctalus leisleri*	☑
☒	Common pipistrelle	*Pipistrellus pipistrellus*	☑

Non UKBAP Bat species recorded within Staffordshire.

Staffordshire Ecological Record shows records of Barn Owl within a 2km radius of the application area. These records are from Dimmingsdale (approx. 900m south), Alton (approx. 2km southeast), Moneystone Quarry (approx. 1km north), and Counslow (approx. 2km southeast).

3.2. Field Surveys

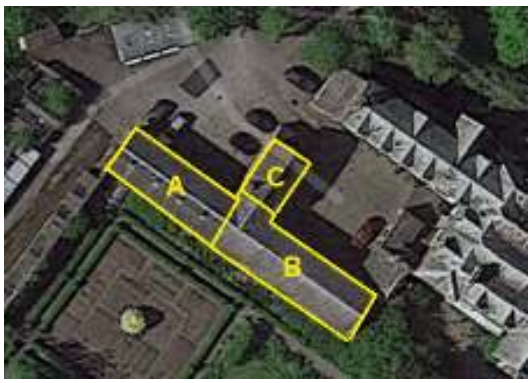
3.2.1. Habitat Description

The site is part of a collection of buildings within a largely agricultural landscape. The immediate surroundings contain extensive gardens, tree lined roads and areas of trees;

and there are nearby woods in all directions. There are watercourses roughly 300m west, 500m north and 600m east of the site, with a pond 350m to the northeast.

3.2.2. Roost Surveys

The site comprises of three buildings shown below:



Building A is a disused outbuilding, the first floor of which is now used as an artist's studio. It is a two-storey brick structure, with timber-framed roof, slate tiles and no inner lining. The roof is in good condition (having been repaired 6 years ago), with limited opportunity for entrance by bats or birds. The windows and skylights are glazed and sealed, providing limited access opportunities for bats or birds. The limited access opportunities and regular daytime use of this building mean that it shows negligible potential for roosting bats. The interior of the building is largely inaccessible for nesting birds, although the eaves are likely to provide nesting opportunities for many bird species.

Building B is a disused outbuilding, not currently used for any purpose. It is a two-storey brick structure, with timber-framed roof, slate tiles and no inner lining. The exterior walls contain ventilation bricks and grills, which provide potential access points for bats. There is an open stairway on the north side of the building, which leads into the building and provides potential access for both bats and birds. The roof is in good condition (having been repaired 6 years ago), with limited opportunity for entrance by bats or birds. The windows are not glazed, with shuttering which leaves potential access spaces for bats. The interior of the main first floor space is open to the roof void, with exposed ridge beam, perlins and rafters providing multiple spaces suitable for roosting bats and/or birds. A small number of scattered bat droppings were found in this area, although it is unclear whether these are the result of bats roosting in the building, or foraging within the building during summer months. An abandoned swallow's nest was also found inside this area. The western end of Building B has a small room on the first floor, which has been plastered. The roof space above this room is accessible to bats and birds from the open stairway adjacent, but it was not possible to fully inspect all parts of this space.

Building C is a former outbuilding, which has been converted into a residential property. The roof is clay-tiled, and is in good condition, as is the brickwork; showing limited access opportunities for birds or bats. It was not possible to inspect the interior of this roof.

4. Assessment

4.1. Constraints on Survey Information

No activity surveys were conducted due to the yearly constraint when bats are in hibernation. It was not possible to fully inspect Building C, but it is understood that the development plans do not include works to the interior or exterior of this building's roof.

4.2. Constraints on Equipment Used

No constraints were identified during the inspection of the buildings with regards to equipment.

4.3. Potential Impacts of Development

4.3.1. Designated Sites

There are three Sites of Special Scientific Interest (SSSI) within 2km; Dimmingsdale & The Ranger SSSI approx. 900m to the south, Whiston Eaves SSSI approx. 1.7km to the northeast, and Bath Pasture SSSI approx. 2km to the northwest. Given the physical distance and the size of the development it is considered that the works to be carried out will not have any negative impact towards the SSSI.

4.3.2. Roosts

Building A shows negligible potential for use by bats. The evidence gathered during this initial assessment implies that there is an acceptably low probability (risk) of harm to bats if the development is allowed to progress without further surveys. In the highly unlikely event that bats are found during the development, work should stop and further advice sought from an experienced, licensed bat ecologist. Nesting birds may be present in the eaves of this building during the bird breeding season (March to August inclusive). Development works affecting the eaves during this time would be likely to cause disturbance/harm to nesting birds. No evidence of use by barn owls was found.

Building B shows moderate potential for use by roosting bats, and evidence of the building being used by bats for either roosting or foraging/exploring. The evidence gathered during this initial assessment implies that there is an unacceptable probability (risk) of harm to bats if the development is allowed to progress without further surveys. Nesting birds may be present in this building during the bird breeding season (March to August inclusive). Development works during this time would be likely to cause disturbance/harm to nesting birds. No evidence of use by barn owls was found.

It was not possible to fully inspect Building C, but it is understood that the development plans do not include works to the interior or exterior of this building's roof. The evidence gathered during this initial assessment implies that there is an acceptably low probability (risk) of harm to bats if the development is allowed to progress without further surveys. In

the highly unlikely event that bats or nesting birds are found during the development, work should stop and further advice sought from an experienced, licensed bat ecologist.

4.3.3. Foraging and Commuting Habitat

The buildings on site provide good foraging habitat for bat and bird species, and are well-connected to the wider landscape by adjacent buildings, hedgerows, tree-lined roads and woodland. If these neighbouring features were to be severed or removed, or likely to be affected by an increase in light spill, there may be significant impacts on commuting routes, particularly if there are roosts in existing buildings or trees nearby.

4.4. Legislation and Policy Guidance

Unlike many smaller mammals, bats have low fecundity with a long and complex life cycle, which is played out over a large spatial landscape. Bats show a strong fidelity to different types of roosts throughout their annual cycle i.e. hibernacula, maternity, bachelor, satellite roosts and feeding perches. Linear features within the landscape such as hedgerows and tree lines are often used by bats for commuting, predator avoidance and foraging. Bats are highly social animals and loss of a single habitat alone can have a serious impact on populations. The status of many bat populations is tentative, being based on relatively few records and are highly susceptible to habitat loss and fragmentation. As such bats are given protected consideration within the following legislation and policy guidelines:

Policy guidelines

PAS 2010	The published 'PAS 2010' 'Planning to halt the loss of biodiversity' which is the government's new policy aimed at all authorities and developers involved in the planning process in the UK to halt biodiversity decline by 2010 and deliver net biodiversity gains as part of the green infrastructure provisions.
National Planning Policy Framework, Section 11:	The recently published framework in 2012, replaces the previous Planning Policy Statement 9. Section 11: Conserving and enhancing the natural environment, reaffirms the Governments commitment to maintaining green belt protections and preventing urban sprawl, retains the protection of designated sites and preserves wildlife, aims to improve the quality of the natural environment, and halt declines in species and habitats, protects and enhances biodiversity and promotes wildlife corridors.
Article 10 of the EC Habitats Directive:	The published Article requires government to develop features such as 'stepping stones' on the landscape, such as clusters of ponds, tracts of rough grassland or scrubland and vegetated railway line embankments.
Wildlife and Countryside Act 1981:	All species of bat are fully protected under the Wildlife and Countryside Act 1981, the European Conservation (Natural Habitats etc.) Regulations 1994, and the Countryside and Rights of Way Act 2000. This legislation makes it illegal to possess or control any live or dead specimens, to damage, destroy or obstruct access to any

	structure or place used for shelter, protection or breeding, and to intentionally disturb a bat while it is occupying a structure or place which it uses for that purpose.
Conservation of Habitats and Species Regulations (2010)	The Conservation of Habitats and Species Regulations 2010 consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994, in respect of England and Wales. It is an offence to possess, sell or offer, or transport for sale any European species of bat or any part derived from such a species. These Regulations also remove the 'incidental result defence'. In other words, it is no longer a defence to show that the killing, capture or disturbance of a species covered by the Regulations or the destruction or damage of their breeding sites or resting places was the incidental and unavoidable result of a lawful activity. Natural England can grant European Protected Species (EPS) licences in respect of development to permit activities that would otherwise be unlawful.
Natural Environment and Rural Communities Act (2006)	Under Section 40 of the Natural Environment and Rural Communities Act (2006), public bodies, including Local and Regional Planning Authorities, have a duty to 'have regard' to the conservation of biodiversity in England when carrying out their normal functions, which includes consideration of planning applications. In compliance with Section 41 of the Act, the Secretary of State has published a list of species considered to be of principal importance for conserving biodiversity in England. This is known as The England Biodiversity List, all of which make up the UK BAP Priority Species. Regional Planning Bodies and Local Planning Authorities will use it to identify the species that should be afforded priority to maintain, restore and enhance species and habitats.
Bird legislation	Most resident nesting birds are protected under the Wildlife and Countryside Act 1981, which protects birds, nests, eggs and nestlings. Some rarer species, such as barn owls, are afforded extra protection.

Please note: If bat species are present at the site, the purpose of this report will only summarize the potential requirements for a bat mitigation package or project. A separate mitigation report or project will include the necessary compensation measures to maintain the conservation status of a European Protected Species.

5. Recommendations and Mitigation

5.1. Further Surveys

Building B is a suspected transitional, feeding, night or daytime summer roost.

2 further dusk emergence surveys should be undertaken.

2 surveyors are required to provide full coverage of the building.

5.2. Mitigation Measures

5.2.1. Proposed Mitigation for Roost Sites

No mitigation is required for the development of Building A.

Proposals for mitigation for the development of Building B will be dependent upon the outcome of activity surveys.

Recommendations are given to enhance the site for nesting birds in future, including the provision of bird boxes.

Further details regarding birds can be found at the following websites:

http://www.rspb.org.uk/wildlife/birdguide/name/s/swallow/encouraging.aspx

http://www.rspb.org.uk/advice/helpingbirds/roofs/internal_boxes.aspx

House sparrow nest Swallows' nest

It is recommended that the development should incorporate a number of bat boxes; where possible, developments should include small access points suitable for bat access and/or wallmounted bat boxes (1FQ-style bat box), rendered into new buildings. Further information for providing access to roosting bats can be found on the Bat Conservation Trust website at http://www.bats.org.uk/pages/new_build.html. It is recommended that bat boxes, such as the Schwegler 2F-DFP, are installed within trees surrounding the site.

Illustration of recommended bat 1FQ designs

Any landscaping relating to the proposed development should also take into consideration bats and other wildlife and it is recommended that only native tree and shrub species are planted. In particular, no plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 should be planted during the landscaping of this development. For further details of Schedule 9 plants, visit the Defra website: www.defra.gov.uk/wildlife-pets/non-native.

Any lighting design around the new development should be considered at an early stage. Light spill can affect the foraging and commuting strategy of many species and should be avoided onto nearby trees and hedges/shrubs, and should not exceed 200 lumens (150 watts). Any security lighting should be on a timer setting and faced down to prevent spillage onto nearby habitats. The height of any lighting columns around the development should not exceed eight metres to reduce further any ecological impact of light pollution. Low-pressure sodium lamps (SOX) fitted with hoods are recommended to direct light below the horizontal plane to minimize upward light spill.

5.2.2. Proposed Mitigation for Foraging and Commuting Habitat

No loss of foraging or commuting habitat will occur as a result of the development.

6. Summary

Building A showed limiting potential due to the lack of roosting opportunities and environmental variables, from this evidence it is concluded that Building A can be redeveloped as planned.

It is understood that plans for Building C do not include works to either the interior or exterior of the roof, nor do they include works within the roof void. It is therefore concluded that Building C can be redeveloped as planned.

Building B will be going under a separate planning application, therefore not constraining the above buildings' planning application. Building B showed both potential for roosting bats and evidence of use by bats. Under the recommendations it is considered that further surveys will be required before a planning application can be made on Building B.

No redundant bird nests were identified in buildings A & C therefore no impact is envisaged for redevelopment of these buildings.

A redundant bird nest was identified in building B. Nesting birds may be present in this building during the bird breeding season (March to August inclusive). Any future works on this building should either take place outside of this period, or a suitably qualified ecologist brought onto site in order to supervise works and advise accordingly.

7. References

Bat Conservation Trust (2007). *Bat Surveys – Good Practice Guidelines*. Bat Conservation Trust: London.

BSBI (2008). *BSBI 2007 List.* [Online]. Available at: http://www.bsbi.org.uk/html/database.html [accessed on 20th October 2010].

The Conservation of Habitats and Species Regulations 2010. SI 2010/490.

The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007. SI 2007/1843, London: HMSO.

Countryside and Rights of Way Act 2000 (c.37). London: HMSO.

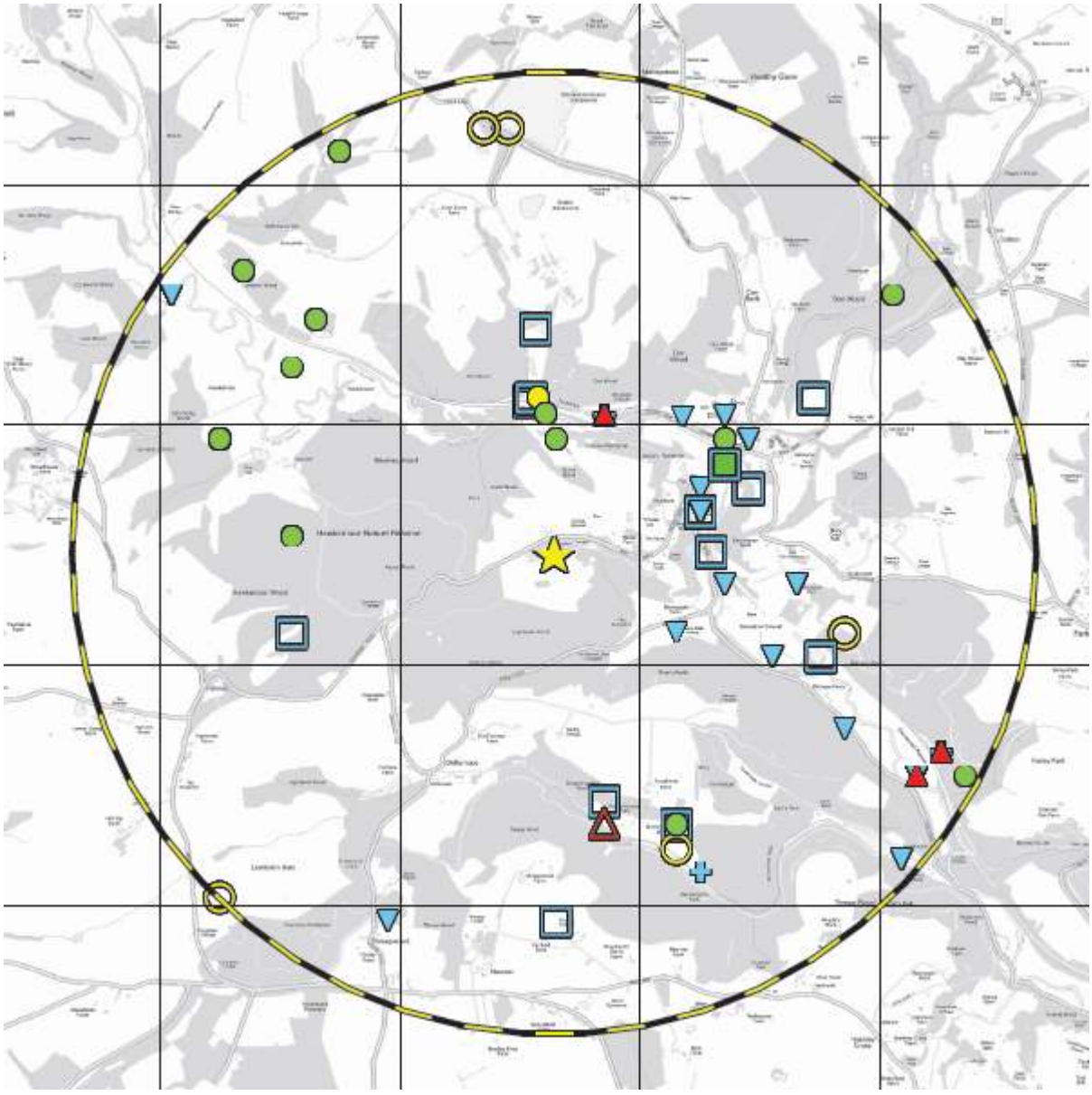
Office of the Deputy Prime Minister (2005) *Planning Policy Statement 9: Biodiversity and Geological Conservation*. The Stationery Office, Norwich.

UK Biodiversity Action Plan (2007). *UK List of Priority Species.* Joint Nature Conservation Committee. [Online]. Available at: http://www.ukbap.org.uk/NewPriorityList.aspx [accessed on 20th October 2010].

Biodiversity Action Reporting System (2010). *Biodiversity Action in Staffordshire.* BARS. [Online]. Available at: http://ukbap-reporting.org.uk/plans/map_county.asp?X=%7BD7D87E4F%2D9520%2D48D6%2D93E0%2DD2698BA05B9D%7D&CTRY=%7B7C884413%2D1AC7%2D48B6%2DADCD%2D23CBA1482CD6%7D&WES= [accessed on 20th October 2010].

Wildlife and Countryside Act 1981 (and amendments) (c.69). London: HMSO.

Appendix 1 Pre-Survey Data Search



Produced for Absolute Ecology by Staffordshire Ecological Record

March 2014

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A legend to the map showing Nature Conservation Sites and Species

Introduction

These colours are used on the site alert mapping within the SWT GIS, but SER cannot guarantee the same colours are used in any other mapping system, particularly those based on ArcView.

Statutory Designations from Natural England's web-site

- National Nature Reserves — NNR (boundary not available owing to OS restrictions)
- Sites of Special Scientific Interest — SSSI (boundary not available owing to OS restrictions)
- Local Nature Reserves — LNR (boundary not available owing to OS restrictions)

Non-statutory Designations from the Staffordshire Grading System (1995 onwards)

- Site of Biological Importance (ex Grade 1 SBI) equivalent to "Local Wildlife Site"
- Biodiversity Alert Site (ex Grade 2 SBI)
- Proposed/potential Site of Biological Importance

Geological Sites

- Regionally Important Geological/geomorphological Site (= Local Geological Site)

Staffordshire Wildlife Trust Sites

- SWT Nature Reserves

Other Nature Reserves

- Royal Society for the Protection of Birds

Ancient Woodland Inventory

- Ancient & Semi-natural Woodland
- Ancient Replanted Woodland

Species Information

- Mammals excluding those listed below
- Otter (Lutra lutra)
- Badger (Meles meles) - not normally supplied
- Water Vole (Arvicola terrestris)
- All bat species
- All bird species
- Any other protected species (precise to 100m)
- All Protected Species Records (precise to 1km)
- Amphibians and reptiles excluding those below
- Great Crested Newt (Triturus cristatus)
- Native Crayfish (Austropotamobius pallipes)
- Flowering plants except those below
- Bluebell (Hyacinthoides non-scripta)
- Butterflies and Moths
- BAP Species Records (precise to 100m)
- BAP Species Records (precise to 1km)

Notes:

The Local Nature Reserve and other nature reserve boundaries can overlay the current grading when both layers are actively visible

Where there are multiple species records for the same grid reference the dot for one species may obscure the dots for other species - all species records will be displayed in the accompanying spreadsheet

Not all the above categories may be present on the accompanying map

Version 2.0 July 2011

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Appendix 2 Photographs

Plate 1: Building A Interior

Plate 2: Building A Exterior

Plate 3: Building B Interior

Plate 4: Building B Interior

Plate 5: Building B Exterior

Plate 6: Open stairwell & Air vent

Plate 7: Window with shuttering providing access for bats