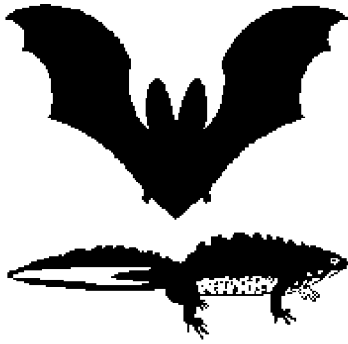




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Bat Assessment

Bevin & Bevin Site

Brewery Hill

Arundel

Stephanie Murphy
September 2011

Registered Office: Butler's House, North Street, Petworth, West Sussex GU28 0DP
Registered in England and Wales No. 06527840

Summary

- The site was surveyed on the 13th September 2011 by a qualified licensed bat ecologist Dr Stephanie Murphy, BSc (Hons) MSc PhD MIEEM, to assess the site for the presence of roosting bats.
- No maternity roosts or important roosting areas for bats have been identified present in the buildings. Only one old Brown Long-eared bat dropping was found in the loft space of the Grade II listed building. This is likely to have come from an individual investigating the structure as opposed to roosting, because the building is in a considerable state of disrepair and the loft space is extremely draughty. The dropping was directly a hole in the roof.
- As there was limited evidence to suggest that the buildings support roosting bats a Natural England EPS bat licence will not be required and the buildings can be demolished and/or renovated as planned. However, as bats have seasonal use of buildings, and features are present that could support bats, in particular the traditional roof tiles on the Grade II listed building and on the main warehouse, it is possible that bats could use these features, given that they are likely to be present in the local area. Therefore, it is strongly recommended that these tiles should be removed carefully by hand under the supervision of a licensed bat ecologist prior to demolition and/or renovation of the buildings.
- Given that the proposed development is situated adjacent to good bat foraging habitat, the new buildings within the development offers opportunities for habitat enhancement for bats. There is a wide range of commercially available bat boxes which can be fitted to the outside of a building, or used like a brick in the construction phase of a development. AEWCLtd. is happy to provide advice and additional information if required.

This report has been prepared by AEWCLtd, with all reasonable skill, care and diligence within the terms of the Contract with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

1 Introduction

- 1.1 AEWCLtd. was commissioned by Martin Critchell Architects to undertake a detailed bat assessment at the former Bevin & Bevin Brewery Site, Brewery Lane, Arundel, West Sussex, to inform the proposed development of the site.
- 1.2 The Bat survey & report have been carried out and prepared by a qualified Natural England licensed bat ecologist Dr Stephanie Murphy, BSc (Hons) MSc PhD MIEEM.
- 1.3 This report gives details of the assessment conducted on the 13th September 2011.

Legislation

- 1.4 All species of bat in the UK are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), and Schedule 2 of the Conservation (Natural Habitats, &c.) Regulations 1994. The Regulations implements the European Habitats and Species Directive (EC Directive 92/43/EEC). Bats are therefore European protected species.
- 1.5 The Act and Regulations give full protection to bats from intentional/deliberate killing, injuring, taking and reckless or intentional disturbance. In addition bat breeding and resting places (i.e. bat roosts) are also protected from damage, destruction and reckless or intentional obstruction of access to such places.
- 1.6 A roost is defined as 'any structure or place which a bat uses for shelter or protection'. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present at the time of survey.
- 1.7 In addition, Greater horseshoe, Lesser horseshoe, Barbastelle and Bechstein's bat are also listed in Annex II of the EC Habitats Directive, which effectively requires that the best of the species' roosting and foraging sites be designated as Special Areas of Conservation (SACs).
- 1.8 The following species of bat are UK BAP Priority species:
 - Barbastelle (*Barbastella barbastellus*)
 - Bechstein's bat (*Myotis bechsteinii*)
 - Greater Horseshoe bat (*Rhinolophus ferrumequinum*)
 - Lesser Horseshoe bat (*Rhinolophus hipposideros*)
 - Common Pipistrelle (*Pipistrellus pipistrellus*)
- 1.9 Due to changes in the UK BAP priority species list during 2007, the Common Pipistrelle has been removed from the list and replaced by Soprano Pipistrelle (*Pipistrellus pygmaeus*). The following additional bat species are now included but do not currently have action plans:

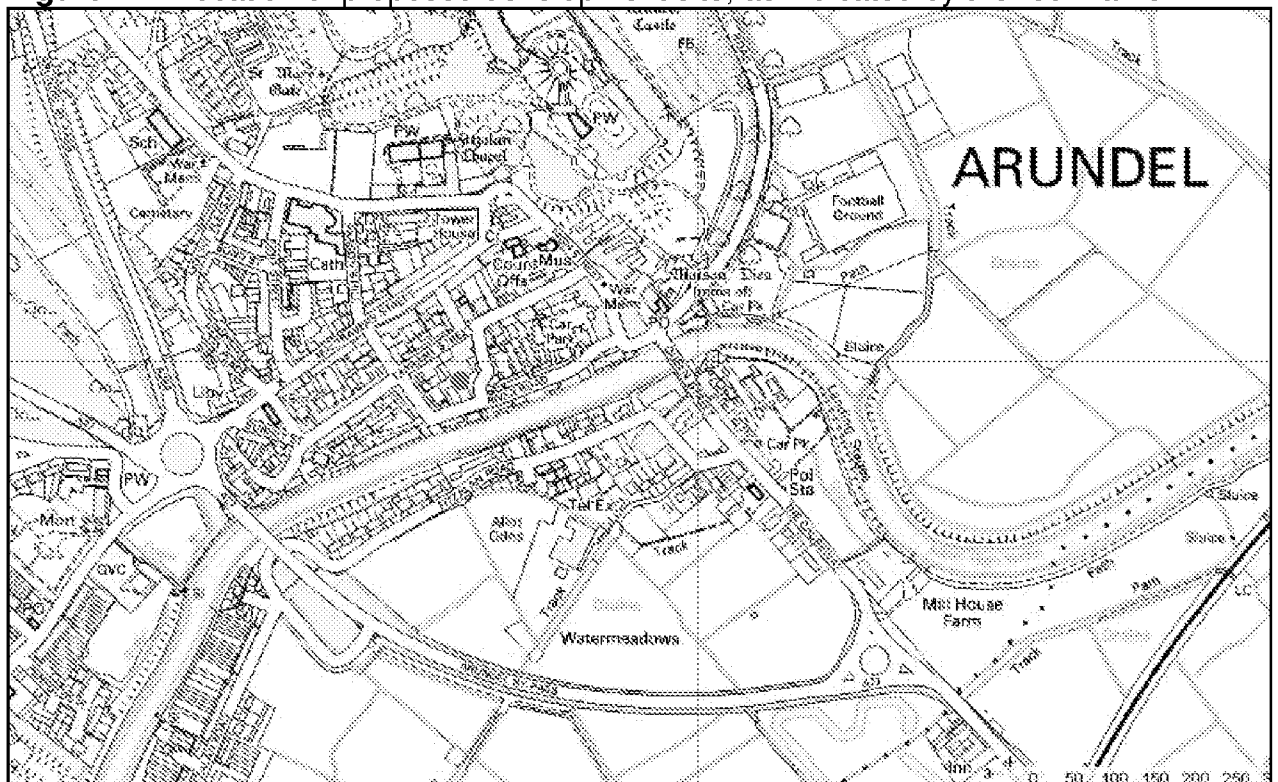
- Noctule (*Nyctalus noctula*)
- Brown Long-eared Bat (*Plecotus auritus*)

1.10 It is also stated in paragraph 47 of PPS 9 that 'the presence of a protected species is a material consideration when a local planning authority is considering a development proposal which, if carried out, would be likely to result in harm to the species or its habitat'. To this end, developers must satisfy the planning authority that measures are taken to mitigate for the loss of bat feeding habitat as well as roosts.

2 Background

2.1 The site consists of a complex of buildings, previously used a brewery, situated on Brewery Hill in the centre of the town of Arundel in West Sussex. The site is located at OS grid TQ 501712 106979 and is bound by Brewery Street to the east, River Road to the south, properties on Arun street to the west and properties on Tarrant Street to the north. The site boundary is located approximately 25 metres from the River Arun and the location of the site is indicated by the red marker in Figure 2.1.

Figure 2.1: Location of proposed development site, as indicated by the red marker.



2.2 The main building within the site boundary is a Grade II listed building that has numerous additional buildings and warehouses effectively 'added on'. The main brick and flint three-storey building is shown in Photograph 2.1, from the eastern aspect. The building has a pitched roof clad in traditional clay tiles.

Photograph 2.1: View of the main Grade II listed building from the east of the site of Bevin & Bevin Brewery site, Arundel.



- 2.3 To the south of the Grade II listed building is a two-storey breeze block and concrete add on, with a pitched roof clad in traditional clay tiles. The building is shown in Photograph 2.2

Photograph 2.2: View of the building to the south of the Grade II listed building, Bevin & Bevin Brewery Site, Arundel.



- 2.4 To the west of the Grade II building are a number of brick and breeze block warehouse extensions with corrugated metal roofs.

- 2.5 These warehouse extensions connect to a two-storey brick and flint building with a pitched roof covered in slate tiles. This building is shown in Photograph 2.3. A breeze block and corrugated metal add-on is situated to the south of this building.

Photograph 2.3: View of the two-storey brick and flint building with a pitched roof covered in Slate tiles to the west of the site, Bevin & Bevin Brewery Arundel.



- 2.6 To the south of the site is an open-fronted barn of brick and flint construction with a corrugated metal roof. This building is shown in Photograph 2.4.

Photograph 2.4: View of the open fronted barn to the south of the site, Bevin & Bevin Brewery Arundel.



- 2.7 To the east of the site are a number of timber frame dilapidated sheds with corrugated metal roof. These are shown in Photograph 2.5.

Photograph 2.5: View of the dilapidated sheds to the east of the site, Bevin & Bevin, Arundel, West Sussex. .



- 2.8 The proposed development plans are to renovate the Grade II listed building and Two storey brick and flint building and, also to demolish the additional buildings in order to construct a residential development. The current development proposals are shown in Appendix 1.

3 Method

- 3.1 The daytime inspection of the site was carried out on the 13th September 2011, a suitable time of year for this type of survey.
- 3.2 The interior and exterior of all the buildings was surveyed using a high-powered torch to illuminate all areas thought to be suitable for roosting bats. Any suitable cracks and crevices were inspected using an endoscope, which gave a clear view of the interior of each feature. All surfaces within the loft spaces of the buildings were also surveyed for signs of bat presence.
- 3.3 An external search around the perimeter of the buildings was also conducted and any possible access points (i.e. gaps and crevices) were noted and surveyed with the high powered torch and endoscope as required.
- 3.4 Features of potential value to bats were surveyed not only for the presence of bats but also for signs that could indicate use by bats, such as:
- bat droppings that are dry and do not putrefy, but can crumble away to dust;
 - staining of access points used by bats to enter the structure; and
 - feeding remains such as moth and butterfly wings.

4 Results

Grade II Listed Building

- 4.1 All potential access points and surfaces on the exterior of the Building 1 were surveyed and no evidence of bats was recorded. However, numerous potential bat access points were noted, such as gaps in the soffits and missing roof tiles.
- 4.2 The interior of the building was surveyed for evidence of bats using a high powered cluson torch and endoscope. There was no evidence present on the first two floors but one old Brown Long-eared bat dropping (*Plecotus auritus*) was found in the loft space of the building. Despite an extensive search of the rafters and roof void of the building, as shown in Photograph 4.1, no further evidence of bats was found. The dropping was directly underneath a hole in the roof, as shown in Photograph 4.2, so may have come from an individual flying over the site or investigating the structure.

Photograph 4.1: One old bat dropping was found in the interior of the loft space of the Grade II listed building.



Photograph 4.2: One old bat dropping was found underneath the hole in the roof of the Grade II listed building.



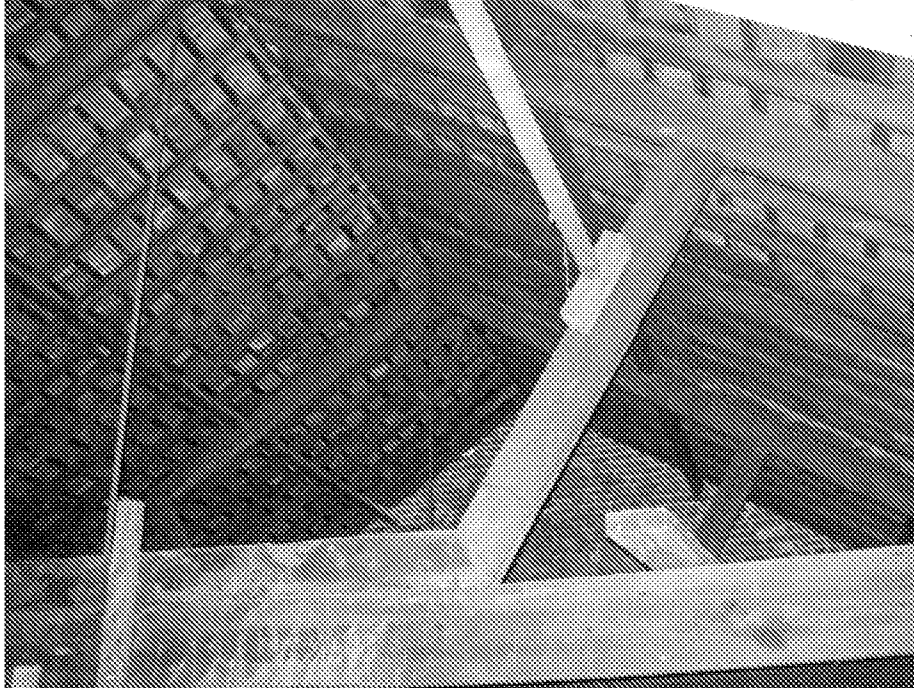
Warehouses to the west of the Grade II Listed Building

- 4.3 The warehouses to the west of the Grade II listed building were inspected thoroughly for evidence of roosting bats but no evidence of bats was found and the buildings were considered to provide limited potential for bats. However, the traditional roof tiles on the main warehouse may provide roosting opportunities for crevice dwelling bats, such as Pipistrelle bats.

Two storey brick and flint building

- 4.4 All potential access points and surfaces on the exterior of the building were surveyed and no evidence of bats was recorded. There were, however, a few gaps noted underneath the slate roof tiles that could potentially allow bats to access the interior loft space of the building.
- 4.5 The interior of the building was surveyed for evidence of bats using a high powered cluson torch and endoscope. There was no evidence present on the first floor. The upper floor, accessed via a ladder, is open to the roof void, as shown in Photograph 4.3. Despite an extensive and thorough inspection, no evidence of bats was recorded internally.

Photograph 4.3: The upper floor of the two-storey brick and flint building was open to the roof void. No evidence of bats was recorded externally or internally.



Open fronted barn

- 4.6 There was no evidence of roosting bats or feeding remains to suggest that the open-fronted barn had been used a night roost.

Dilapidated Sheds

- 4.7 There was no evidence of roosting bats in the dilapidated sheds to the east of the site and the sheds were considered unsuitable for roosting bats.

Trees

- 4.8 There are no trees within the site boundary that could potentially support roosting bats.

5 Constraints

- 5.1 Bats are difficult to locate in large structures, with so many potential roosting areas, particularly in inaccessible areas such as large buildings, finding the exact roosting site can be difficult, especially male/single bat roosting sites.
- 5.2 Bats can have seasonal use of buildings and being so mobile may arrive and start using a site after it has been surveyed, or roost somewhere else during the period it was surveyed. For this reason bats may potentially be present but remain undetected, particularly during day time assessment surveys.

6 Conclusions

- 6.1 Initial observations consider the local area ideal for a number of bat species. The buildings are traditional and the site is situated adjacent to the River Arun with the surrounding riparian habitat ideal foraging for a number of species that would be present in the local area.
- 6.2 No maternity roosts or important roosting areas for bats have been identified present in the buildings. Only one old Brown Long-eared bat dropping was found in the loft space of the Grade II listed building. This is likely to have come from an individual investigating the structure as opposed to roosting, because the building is in a considerable state of disrepair and the loft space is extremely draughty. The dropping was directly a hole in the roof.
- 6.3 As there was limited evidence to suggest that the buildings support roosting bats a Natural England EPS bat licence will not be required and the building can be demolished and/or renovated as planned. However, as bats have seasonal use of buildings, and features are present that could support bats, in particular the traditional roof tiles on the Grade II listed building and on the main warehouse, it is possible that bats could use these features, given that they are present in the local area. Therefore, it is strongly recommended that these tiles should be removed carefully by hand under the supervision of a licensed bat ecologist prior to demolition and/or renovation of the buildings.
- 6.4 Given that the proposed development is situated adjacent to good bat foraging habitat, the new buildings within the development offers opportunities for habitat enhancement for bats. There is a wide range of commercially available bat boxes which can be fitted to the outside of a building, or used like a brick in the construction phase of a development. AEWCLtd. is happy to provide advice and additional information if required.

