



Main House, Ampney Park

Bat Surveys

June/July 2021

Client: Simon Morray-Jones Architects Ltd Report Ref: SEB2429_02 Author: Kate Hayward MCIEEM www.seasonsecology.co.uk



Seasons Ecology is a limited company registered in England & Wales. Registered no. 11258906 Directors: Kate Hayward MCIEEM & Hannah Maben MCIEEM Registered Address: 69 High Street, Bideford, Devon, EX39 2AT

Non-Technical Summary

Site Name and Location	Main House at Ampney Park, London Road, Ampney Crucis, Cirencester, GL7 5RY (central grid reference: SP 06456 01901).		
Scope of Works and	Bat surveys undertaken during June/July 2021:		
Survey Methods	One dusk emergence survey on 7 th June 2021.		
	One dusk emergence survey on 12 th July 2021.		
	One dawn re-entry survey on 2 nd July 2021.		
	Five surveyors were present for each survey.		
	Methods refer to BCT (2016) <i>Bat Surveys for Professional Ecologists: Good Practice Guidelines</i> Bat Conservation Trust. Collins. Third Edition.		
Lead Personnel	Kate Hayward MCIEEM and Callum Pearson Qualifying CIEEM.		
Purpose of Works	Following a Preliminary Bat Roost Assessment and Survey in March 2021 (Seasons Ecology), to further assess the extent of use of the Main House by bats, to inform Planning and Listed Buildings applications for internal alterations and refurbishment and external repairs. The surveys will inform the approach to works and licensing requirements.		
Summary of Survey Results	Based on the results of the Bat Surveys (June/July 2021) and Preliminary Bat Roost Assessment and Survey (March 2021), the Main House at Ampney Park supports 12 roosts for the species: common pipistrelle, soprano pipistrelle, lesser horseshoe and brown long-eared:		
	 Three day roosts for common pipistrelle: Underneath a roof tile on the south aspect gable, within one roof space (Roof Space 4) and behind dense ivy on the south aspect gable. 		
	 Four day roosts for soprano pipistrelle: Underneath a roof tile on the south aspect gable, under roof tiles above Roof Space 1, behind dense ivy on the south aspect gable and within a gap in stonework above the cellar entrance. 		
	 Two day roosts for brown long-eared: Within two roof spaces (Roof Spaces 1 and 2). 		
	 Two day roosts and one night roost for lesser horseshoe: Within Roof Space 4 and the cellar and under the stairs leading down to the cellar (night roost). 		
Impacts	acts In the absence of mitigation, the works will result in the loss of six roosts: one brown le eared day roost, one lesser horseshoe day roost, two common pipistrelle day roosts two soprano pipistrelle day roosts.		
	The works will result in disturbance to the lesser horseshoe day roost within the cellar.		
Recommendations	Cellar works – Timing of works to avoid the period when bats are likely to be present and pre-works checks.		
	All other works – A European Protected Species Licence will be required. A method statement has been outlined providing an appropriate approach to the works, including toolbox talk, pre-works checks and supervision by an appropriately licensed bat ecologist, receptor sites, and new provision for the loss of roosts following the works.		
	Recommendations for wider biodiversity enhancements have also been provided.		



Contents

1. Introduction		4
2.	Survey Methods	5
2.2	Dusk Emergence Surveys	5
2.3	Dawn Re-entry Survey	5
2.4	Constraints to Surveys	5
2.5	Personnel	5
3.	Survey Results	6
3.2	Dusk Emergence Surveys	6
3.3	Dawn Re-entry Survey	8
3.4	Surveys Summary	9
4.	Interpretation and Evaluation	10
5.	Legislation	11
6.	Impacts	11
6.2	Roof Space 1	11
6.3	Roof Space 2	12
6.4	Roof Space 4	12
6.5	Cellar	12
6.6	External Stonework	12
7.	Recommendations	13
7.2	Cellar Works	13
7.3	All Other Works (Roofs, Roof Spaces, Stonework)	13
8.	Annexes	16
Ann	lexes	16



- 1.1.2 In 2021, Seasons Ecology was instructed by Simon Morray-Jones Architects Ltd, on behalf of their client, the property owner, to undertake bat surveys the Main House at Ampney Park, London Road, Ampney Crucis, Cirencester, GL7 5RY (central grid reference: SP 06456 01901). The survey was recommended following a Preliminary Bat Roost Assessment and Survey undertaken of the Main House in March 2021 by Seasons Ecology¹. The purpose of the surveys is to further assess the extent of use of the Main House by bats, to inform Planning and Listed Buildings applications for internal alterations and refurbishment and external repairs. The surveys will inform the approach to works and licensing requirements.
- 1.1.3 The Preliminary Bat Roost Assessment and Survey assessed the Main House as *High* suitability to roosting bats, owing to the age, style and size of the house, presence of suitable features and its ecological context, being surrounded by high quality foraging and commuting habitats. Five bat roosts have been confirmed within the Main House:
 - Roof Space 1 Confirmed presence of brown long-eared *Plecotus auritus* roost.

Low numbers of bat droppings (approx. 10) confirmed by DNA analysis.

• Roof Space 2 - Confirmed presence of brown long-eared roost.

Low numbers of bat droppings (approx. 10) confirmed by DNA analysis.

• Roof Space 4 - Confirmed presence of lesser horseshoe *Rhinolophus hipposideros* and common pipistrelle *Pipistrellus pipistrellus* roosts.

Several concentrated piles of bat droppings (several hundred droppings each) confirmed by DNA analysis as lesser horseshoe.

Scattered bat droppings (numbering approx. 100) confirmed by DNA analysis as common pipistrelle.

• Cellar - Confirmed presence of lesser horseshoe roost.

Several concentrated piles of bat droppings (30 to 100 droppings each) confirmed by DNA analysis.

1.1.4 This report details the results of the bat surveys and provides an appropriate approach to works, including protection, mitigation and enhancement measures, and should be read in conjunction with the Preliminary Bat Roost Assessment and Survey produced by Seasons Ecology (March 2021).

¹ Seasons Ecology (March 2021) Preliminary Bat Roost Assessment and Survey. Ampney Park (SEB2429_01).



- 2.1.1 Three bat surveys were undertaken of the Main House at Ampney Park comprising two dusk emergence surveys and one dawn emergence survey. Five surveyors were present for each survey to adequately cover all elevations of the building.
- 2.1.2 Surveyor locations are shown in the Bat Survey Results Plan at Annex 1.
- 2.1.3 Survey methods are provided below and refer to survey guidelines in BCT (2016)².

2.2 Dusk Emergence Surveys

- 2.2.1 Two dusk emergence surveys were carried out, one on 7th June and one on 12th July 2021. The surveys commenced 15 minutes before sunset and continued for an hour-and-a-half after sunset.
- 2.2.2 Each surveyor was equipped with an Echo Meter Touch bat detector supported by an Apple iPad Mini 4 interface, on which all bat activity was recorded.
- 2.2.3 Passive acoustic recording devices (*Titley AnaBat Express*) were also used for the surveys. These were positioned in the same locations as the surveyors and were set on 'continuous' recording mode for the duration of the surveys. Recordings were later analysed using AnalookW 4.2.24. software to aid the identification of species with reference to Russ (2012³).

2.3 Dawn Re-entry Survey

- 2.3.1 One dawn re-entry survey was carried out on 2nd July 2021. The survey commenced an hourand-a-half before sunrise and continued for 15 minutes after sunrise.
- 2.3.2 Each surveyor was equipped with an Echo Meter Touch bat detector supported by an Apple iPad Mini 4 interface, on which all bat activity was recorded.
- 2.3.3 Passive acoustic recording devices (*Titley AnaBat Express*) were also used for the survey. These were positioned in the same locations as the surveyors and were set on 'continuous' recording mode for the duration of the survey. Recordings were later analysed using AnalookW 4.2.24. software to aid the identification of species with reference to Russ (2012).

2.4 Constraints to Surveys

2.4.1 There were no constraints to the surveys; all aspects of the building were visible for the surveys, the weather conditions were suitable and the surveys were undertaken during the optimal survey period.

2.5 Personnel

2.5.1 The surveys were led by Callum Pearson. Callum is an experienced bat surveyor and ecological consultant, and qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

³ Russ, J. (2012) British Bat Calls. A Guide to Species Identification. Pelagic Publishing.



² Bat Conservation Trust (BCT) (2016) *Bat Surveys for Professional Ecologists. Good Practice Guidelines.* Bat Conservation Trust. Collins. Third Edition.

- 2.5.2 The surveys were overseen by Kate Hayward who has produced this report. Kate is a licensed bat ecologist registered to use Class Licence CL18 (Bat Survey Level 2) (class licence registration number 2015-15106-CLS-CLS), a full member of CIEEM and has over 20 years' experience of advising on protected species and development projects.
 - 3. Survey Results
- 3.1.1 The results of the bat surveys are provided below. The locations of the surveyors and the key results are shown at Annex 1.

3.2 Dusk Emergence Surveys

7th June 2021

- 3.2.1 The survey commenced at 21:07 and finished at 22:52. Sunset was at 21:22. Weather conditions were suitable, with a start temperature of 17°C and end temperature of 14°C, wind was at Beaufort 0⁴, with 0% precipitation and 10% cloud cover.
- **3.2.2** One soprano pipistrelle *Pipistrellus pygmaeus* was observed emerging from and re-entering a gap in the stonework below the guttering of the single-storey roofline directly above the cellar at 21:38 (16 minutes after sunset).
- **3.2.3** One soprano pipistrelle was observed emerging from under a roof tile on the south aspect gable at 21:40 (18 minutes after sunset).
- **3.2.4** One common pipistrelle was observed emerging from under a different roof tile on the south aspect gable at 21:43 (21 minutes after sunset).
- **3.2.5** Two soprano pipistrelle were observed emerging from under a roof tile just south of the central chimney above Roof Space 1 at 21:47 (25 minutes after sunset).
- **3.2.6** One lesser horseshoe was observed emerging from underneath the stairwell to the cellar at 21:51 (29 minutes after sunset).
- 3.2.7 General bat activity was high and by at least five species; common pipistrelle, soprano pipistrelle, noctule *Nyctalus noctula*/Leisler's *N. leisleri*, brown long-eared and *Myotis* species (probably Daubenton's bat *Myotis daubentonii*).
- 3.2.8 Activity was mainly by pipistrelle species. Two individuals were observed commuting past the southern aspect of the Main House at 21:26 and 21:27 (four minutes and five minutes after sunset). Between 21:32 and 21:46 (10 minutes and 23 minutes after sunset), five individuals were observed foraging and commuting along the eastern aspect of the Main House and commuting from the direction of the adjacent church (off-site), towards the Main House. Four individuals were observed socialising over the roof of the Main House and around adjacent mature trees from 21:45 to 22:18 (22 minutes to 56 minutes after sunset. Four individual pipistrelle bats were observed commuting across or foraging and socialising around the courtyard by the cellar entrance between 21:38 and 21:56 (16 minutes and 34 minutes after



⁴ The Beaufort scale of wind velocity: 0 = Calm, 1 = Light Air, 2 = Light Breeze, 3 = Gentle Breeze, 4 = Moderate Breeze, 5 = Fresh Breeze, 6 = Strong Breeze, 7 = Near Gale, 8 = Gale, 9 = Strong Gale, 10 = Storm, 11 = Violent Storm, = 12 Hurricane (<u>http://www.metoffice.gov.uk</u>).

sunset). Pipistrelle species were recorded but not seen another three times throughout the survey from 22:22 to 22:35 (60 minutes and 73 minutes after sunset).

3.2.9 Noctule/Leisler's was recorded but not seen on four occasions during the survey from 21:40 to 22:32 (18 minutes to 70 minutes after sunset). Brown long-eared was also recorded but not seen six times during the survey from 21:45 to 22:47 (22 minutes to 85 minutes after sunset). One *Myotis* species (probably Daubenton's bat) was recorded but not seen at 22:27 (65 minutes after sunset) by the surveyor located to the west of the Main House.

12th July 2021

- 3.2.10 The survey commenced at 21:07 and finished at 22:52. Sunset was at 21:22. Weather conditions were suitable, with a start temperature of 18°C and end temperature of 16°C, wind was at Beaufort 0, with 0% precipitation and 60% cloud cover.
- **3.2.11** Four common pipistrelle were observed emerging from behind the dense ivy at the south aspect gable at 21:28, 21:32 and 21:39 (6 minutes, 10 minutes and 17 minutes after sunset).
- **3.2.12** One common pipistrelle was observed emerging from under a roof tile within the roof valley above Roof Space 4, near the central chimneys, at 21:39 (17 minutes after sunset).
- 3.2.13 General bat activity was moderate and by at least seven species; common pipistrelle, soprano pipistrelle, noctule/Leisler's, brown long-eared, serotine *Eptesicus serotinus*, *Myotis* species (probably Daubenton's bat and Natterer's bat *Myotis nattereri*).
- 3.2.14 Activity was mainly by common pipistrelle, which were observed commuting south past the south-east corner of the building and across the courtyard at the north aspect and foraging and socialising over the roof and over amenity grassland to the south of the Main House from 21:32 to 22:09 (10 minutes to 47 minutes after sunset).
- 3.2.15 Noctule/Leisler's was recorded but not seen four times from 21:32 to 22:34 (10 minutes to 72 minutes after sunset). Two brown long-eared were observed commuting over the Main House southwards, with one heading towards the Acacia tree to the south of the Main House and the other heading eastward at 21:52 (30 minutes after sunset). Brown long-eared was recorded but not seen a further two times at 22:30 and 22:36 (68 minutes and 74 minutes after sunset).
- 3.2.16 One *Myotis* species (probably Daubenton's bat) was observed foraging around the large Acacia tree to the south of the Main House from 22:07 to 22:10 (45 minutes to 48 minutes after sunset) and a further two individual Daubenton's bat were then observed foraging around the surveyor located at the south aspect of the Main House from 22:18 to 22:23 (56 minutes to 61 minutes after sunset).
- 3.2.17 One *Myotis* species (probably Natterer's bat) was observed foraging over the amenity grassland to the south of the Main House at 22:13 (51 minutes after sunset). One Natterer's bat was recorded but not seen at 22:41 (79 minutes after sunset) by the surveyor located at the south aspect of the Main House. One serotine was also recorded but not seen by the surveyor located at the south aspect of the South aspect of the Main House at 22:24 (62 minutes after sunset).



3.3 Dawn Re-entry Survey

2nd July 2021

- 3.3.1 The survey commenced at 03:28 and finished at 05:13. Sunrise was at 04:58. Weather conditions were suitable, with a start temperature of 14°C and end temperature of 13°C, wind was at Beaufort 1, with 0% precipitation and 100% cloud cover.
- 3.3.2 One lesser horseshoe was observed perching under the stairs to the cellar at 03:35 (83 minutes before sunrise).
- **3.3.3** One soprano pipistrelle was observed re-entering the dense ivy on the south aspect gable at 03:51 (67 minutes before sunrise).
- **3.3.4** Two common pipistrelle were observed re-entering under a roof tile within the roof valley above Roof Space 4, near the central chimneys, at 04:12 (46 minutes before sunrise).
- **3.3.5** One lesser horseshoe was observed emerging from under the cellar door and flying under the stairs of the cellar at 04:47 (11 minutes before sunrise).
- 3.3.6 General bat activity was high and by at least nine bat species; common pipistrelle, soprano pipistrelle, *Myotis* species (probably Daubenton's bat and Natterer's bat), noctule/Leisler's, serotine, brown long-eared, lesser horseshoe and barbastelle *Barbastella barbastellus*.
- 3.3.7 Activity was mainly by pipistrelle species which were observed commuting and foraging over the courtyard at the north aspect of the Main House, flying over the roof (before re-entering under a roof tile above Roof Space 4), commuting in front of the south aspect of the Main House from west to east and commuting south along the east aspect of the Main House towards the formal gardens from 03:39 to 04:31 (79 minutes to 27 minutes before sunrise).
- 3.3.8 One *Myotis* species (probably Daubenton's bat) was observed commuting from the formal gardens to the south of the Main House, northwards, past the east aspect of the Main House at 03:38 (80 minutes before sunrise). A further two Daubenton's bat passes were recorded but not seen at 04:02 and 04:30 (56 minutes and 28 minutes before sunrise).
- 3.3.9 Noctule/Leisler's was recorded but not seen three times from between 03:32 and 03:52 (74 minutes and 52 minutes before sunrise). Two noctule/Leisler's were observed commuting high overhead at 04:11 and 04:25 (47 minutes and 33 minutes before sunrise).
- 3.3.10 One brown long-eared was observed foraging to the south of the Main House at 04:06 (52 minutes before sunrise). A further three brown long-eared passes were recorded but not seen by the surveyor located at the east aspect of the Main House between 03:30 and 04:07 (78 minutes and 51 minutes before sunrise).
- 3.3.11 Two lesser horseshoe passes were recorded but not seen by the surveyor located near the cellar entrance at 03:39 and 04:01 (79 minutes and 57 minutes before sunrise). One serotine pass was also recorded but not seen by this surveyor at 03:55 (63 minutes before sunrise).



3.4 Surveys Summary

3.4.1 Table 1 below summarises the results of the bat surveys.

Table 1: Surveys Summary – Bat Emergence and Re-Entry Surveys, 7th June, 2nd July and 12th July 2021

Survey	Summary
1	<u>7th June 2021</u>
	One soprano pipistrelle emerged from and re-entered a gap in the stonework below the guttering, at the single-storey roofline directly above the cellar at 21:38.
	One soprano pipistrelle emerged from under a roof tile on the south aspect gable at 21:40.
	One common pipistrelle emerged from under a roof tile on the south aspect gable at 21:43.
	Two soprano pipistrelle emerged from under a roof tile just south of the central chimney above Roof Space 1 at 21:47.
	One lesser horseshoe emerged from underneath the stairwell to the cellar at 21:51.
	High general bat activity by at least five bat species; common pipistrelle, soprano pipistrelle, noctule/Leisler's, brown long-eared and <i>Myotis</i> species (probably Daubenton's bat).
2	2 nd July 2021
	One lesser horseshoe perching under the stairs to the cellar at 03:35.
	One soprano pipistrelle re-entered the dense ivy on the south aspect gable at 03:51.
	Two common pipistrelle re-entered under a roof tile within the roof valley above Roof Space 4, near the central chimneys, at 04:12.
	One lesser horseshoe emerged from under the cellar door and flew under the stairs of the cellar at 04:47.
	High general bat activity by at least nine bat species; common pipistrelle, soprano pipistrelle, <i>Myotis</i> species (probably Daubenton's and Natterer's bats), noctule/Leisler's, serotine, brown long-eared, lesser horseshoe and barbastelle.
3	<u>12th July 2021</u>
	Four common pipistrelle emerged from behind the dense ivy at the south aspect gable at 21:28, 21:32, and 21:39.
	One common pipistrelle emerged from under a roof tile within the roof valley above Roof Space 4, near the central chimneys, at 21:39.
	Moderate general bat activity by at least seven bat species; common pipistrelle, soprano pipistrelle, noctule/Leisler's, brown long-eared, serotine and <i>Myotis</i> species (probably Daubenton's and Natterer's bats).



4. Interpretation and Evaluation

- 4.1.1 Based on the results of the bat surveys (June/July 2021) and preliminary bat roost assessment and survey (March 2021), the Main House at Ampney Park supports 12 roosts for the species: common pipistrelle, soprano pipistrelle, lesser horseshoe and brown long-eared.
- 4.1.2 Peak counts recorded across the surveys were five common pipistrelle at two roost locations (emergence survey on 12th July 2021), four soprano pipistrelle at three roost locations (emergence survey on 7th June 2021) and two lesser horseshoe at two roost locations (emergence survey on 7th June 2021 and re-entry survey on 2nd July 2021). Brown long-eared was not recorded emerging from, or re-entering roosts, during the surveys.
- 4.1.3 Referring to the peak counts of each species recorded, the roosts are assessed as day roosts for common pipistrelle, soprano pipistrelle, brown long-eared and lesser horseshoe and one night roost for lesser horseshoe.
- 4.1.4 The location and status of each roost is detailed below.
 - Common pipistrelle Three Day Roosts:
 - 1. Underneath a roof tile on the south aspect gable.
 - 2. Within Roof Space 4 (scattered droppings numbering approx. 100), with access gained via roof tiles within the roof valley above the roof space, near to the central chimneys.
 - 3. Behind the dense ivy on the south aspect gable.
 - Soprano pipistrelle Four Day Roosts:
 - 1. Underneath a roof tile on the south aspect gable.
 - 2. Underneath roof tiles within the roof valley above Roof Space 1.
 - 3. Behind the dense ivy on the south aspect gable.
 - 4. Within a gap in the stonework below the guttering, at the single-storey roofline directly above the cellar.
 - Brown long-eared Two Day Roosts:
 - 1. Within Roof Space 1 (low numbers of bat droppings, access point not identified).
 - 2. Within Roof Space 2 (low numbers of bat droppings, access point not identified).
 - Lesser horseshoe Two Day Roosts and One Night Roost:
 - 1. Day roost within Roof Space 4 (several piles of hundreds of droppings, access point not identified).
 - 2. Day roost within the cellar with access underneath the cellar door.
 - 3. Night roost under the stairs leading down to the cellar.
- 4.1.5 Referring to the Bat Mitigation Guidelines (2004), day roosts for common pipistrelle, soprano pipistrelle and brown long-eared have low conservation significance, being roosts for individual bats/low numbers of bats of a common species. Day roosts for lesser horseshoe have medium conservation significance, being roosts for individuals of a rare/Annex II species.



4.1.6 General bat activity was by at least nine bat species; common pipistrelle, soprano pipistrelle, serotine, *Myotis* species (Daubenton's and Natterer's bats), brown long-eared, noctule/Leisler's, lesser horseshoe and barbastelle. The wider Ampney Park estate supports high quality bat foraging and commuting habitats and is surrounded by further moderate to high-quality habitats; the Ampney Brook flows through the estate approximately 150m to the south of the Main House, there are patches of woodland, pastures, large ponds and mature hedgerows and scattered mature trees in all directions. The adjacent church to the east of the Main House offers high suitability to roosting bats.

5. Legislation

- 5.1.1 Bat species in England and Wales are protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to:
 - Deliberately capture, injure or kill bats;
 - Intentionally or recklessly disturb bats;
 - Intentionally or recklessly obstruct access to any structure or place which bats use for shelter or protection; and,
 - Deliberately damage or destruction of a breeding site or resting place.
- 5.1.2 With the exception of disturbance, this legislation applies throughout the year whether bats are present or not at the time of works being carried out and irrespective of planning permission being obtained or being required.

6. Impacts

6.1.1 The Main House is the subject of internal layout alterations and re-roofing and repairs to external areas, including slate tiles on the roofs above Roof Space 4 and stonework. Remediation/upgrade works are proposed for the cellar, including the removal of asbestos lagging around heating pipes and upgrading of the heating system.

6.2 Roof Space 1

One brown long-eared roost in roof space and one soprano pipistrelle roost under roof tile above Roof Space 1.

One soprano pipistrelle day roost and one common pipistrelle day roost under roof tiles to the south of Roof Space 1.

6.2.1 No works proposed to the roof space or roof tiles above or to the south of the roof space, but adjacent works to Roof Space 2 to the north of Roof Space 1 (see below) will disturb the brown long-eared day roost within the roof space and the soprano pipistrelle day roost under roof tiles above Roof Space 1.



6.3 Roof Space 2

One brown long-eared day roost in roof space.

6.3.1 Internal works are for the removal of the ceiling in the en-suite bathroom to Bedroom 9. This will result in the loss of Roof Space 2 and subsequently the loss of the brown long-eared day roost.

6.4 Roof Space 4

One common pipistrelle day roost and one lesser horseshoe day roost.

- 6.4.1 The internal works are for a new roof light to the en-suite bathroom in Bedroom 3, which will impact the roof space, modifying the roosts with a very minor reduction in area of the roof space (reduced from 170sqm to 166sqm), and will create disturbance during the works.
- 6.4.2 Roof repairs to slate tiles will result in the loss of access points into Roof Space 4; roof tiles located near the valley roof, near the central chimneys.

6.5 Cellar

Lesser horseshoe day roost and night roost.

- 6.5.1 Upgrading of the heating system throughout the Main House will impact the lesser horseshoe day roost through disturbance during the works. The plant room is located adjacent to the cellar but separate from it, but all heating pipes run through the cellar from the plant room. Removal of asbestos cladding around some of the heating pipes leading through the cellar will create disturbance.
- 6.5.2 The night roost under the stairs leading down to the cellar will not be impacted as works will be undertaken during daylight hours.

6.6 External Stonework

One common pipistrelle day roost behind ivy and two soprano pipistrelle day roosts behind ivy and gap in stonework above cellar.

6.6.1 External repairs to stonework will result in the loss of these roosts.



7. Recommendations

7.1.1 To maintain favourable conservation status of bats and to avoid contravening the legislation affording protection to bats, measures will need to be taken to avoid harming bats during the works. Mitigation, compensation and enhancement measures will be required.

7.2 Cellar Works

- 7.2.1 Upgrading of the heating system and removal of asbestos lagging on some of the pipework will disturb the lesser horseshoe day roost in the cellar. The works will not result in any material changes to the roost. Therefore, providing works are timed outside of the period when bats are present, a European Protected Species Licence will not be required.
- 7.2.2 The following approach should be taken:
 - 1. Works will be timed to avoid the active season for bats, so works must be undertaken from October to March.
 - 2. A pre-works check of the cellar will be undertaken by a Licensed Bat Ecologist to confirm the absence of bats. Should any bats be found within the cellar then works will be postponed until a European Protected Species Licence is obtained.
 - 3. If no bats are present within the cellar, deemed clear of bats by the Licensed Bat Ecologist, then works will commence.
 - 4. Should a bat be observed in the cellar at any time during the works, then works will stop and advice sought from the Licensed Bat Ecologist.

7.3 All Other Works (Slate-tiled Roofs, Roof Spaces, Stonework)

7.3.1 The following approach will be required for all works affecting the roofs, Roof Spaces 1, 2 and 4 and external stonework:

European Protected Species Licence

7.3.2 Following receipt of Planning and Listed Buildings consents, a European Protected Species Licence will be obtained prior to any works commencing. This will detail the method statement to be followed prior to and during works, and post-completion monitoring requirements.

Timing of Works

- 7.3.3 Works affecting Roof Space 4, the location of a roost for a rare species, lesser horseshoe, will be timed to avoid the period when the bats are present, so works will need to be undertaken from October to March.
- 7.3.4 Works affecting Roof Space 2 and external stonework, are not subject to timing restrictions (providing Roof Space 4 is not disturbed), but where possible it is recommended that works are also timed between October and March.

Method Statement

- 7.3.5 On receipt of the licence, a Toolbox talk will be given by the Licensed Bat Ecologist to site contractors on the roosts present, bat legislation and sensitive working methods.
- 7.3.6 Before works commence, replacement roosting habitat will be provided (see paragraph 7.3.11 below).



- 7.3.7 Pre-works checks of Roof Spaces 2 and 4 will be carried out by the Licensed Bat Ecologist. Any bats found will be placed within one of the pre-erected bat boxes by the Licensed Bat Ecologist. For any lesser horseshoe bats found, these will be placed in the cellar (works to the cellar will be completed before the start of all other works).
- 7.3.8 Cracks in stonework will be inspected using an endoscope by the Licensed Bat Ecologist. Any bats found will be placed within one of the pre-erected bat boxes by the Licensed Bat Ecologist.
- 7.3.9 Supervision of the removal of slate roof tiles above Roof Space 4 will be undertaken by the Licensed Bat Ecologist. Any bats found will be placed within one of the pre-erected bat boxes by the Licensed Bat Ecologist.
- 7.3.10 Roof tiles will be lifted up vertically off the roof, rather than sliding horizontally, with the underside of each tile checked for bats and the felt and batons below checked for bats. Any bats found will be placed within one of the pre-erected bat boxes by the Licensed Bat Ecologist.

Replacement Roosting Habitat

7.3.11 Prior to works commencing nine bat boxes will be installed on three trees (three per tree) near the Main House. These will be Low Profile Woodstone Bat Boxes, suitable for crevice-dwelling species of bat. The bat boxes will be positioned at heights of between 3m and 5m off the ground and facing south-east to south-west as advised by the Licensed Bat Ecologist.

The bat boxes will be retained on the trees following the completion of works to provide long-term roosting habitat.

Re-instatement of Bat Roosts

Roof Space 1

- 7.3.12 Roof space 1 will not be directly impacted by the works (disturbance only) and will be retained as a brown long-eared roost. Four raised tiles will be provided to allow access for bats beneath to replace the loss of common and soprano pipistrelle roosts within stonework. Two of the raised tiles will have a gap provided in the roof lining below to provide access into the roof space for brown long-eared bat.
- 7.3.13 Roof Space 1 is currently a roost for brown long-eared and enhanced access provision for this species into the roof space will compensate for the loss of Roof Space 2, also a brown long-eared day roost.

Roof Space 4

- 7.3.14 During re-roofing works above Roof Space 4, four raised tiles will be provided to allow access for bats beneath. These raised tiles will each have a gap provided in the roof lining below to provide access into the roof space for common pipistrelle.
- 7.3.15 A dormer entrance for lesser horseshoe will be installed to provide suitable access for this species.

7.3.16 Roof Space 4 must be lined with a Bituminous 1F felt underlay.

Enhancement of Bat Roosting Habitat

7.3.17 Due to the listed status of the Main House at Ampney Park, there is limited scope to provide enhanced roosting opportunities on the building itself. Furthermore, the majority of the roosts can be retained or reinstated following the works with only the day roosts located within stonework (two common pipistrelle roosts and one soprano pipistrelle roost) being permanently lost. However, the wider grounds offer ample opportunity to enhance bat roosting habitat.



It is recommended that a further five mature trees within the wider grounds are selected to support bat boxes, with three being installed on each tree, at heights of between 3m and 5m from the ground and facing south-east to south-west as advised by the Licensed Bat Ecologist. <u>Lighting</u>

7.3.18 No additional lighting is proposed. The new roof light installed in the en suite bathroom in Roof Space 4 will result in a minor increase in light levels, which could affect roosting bats within Roof Space 4 (common pipistrelle and lesser horseshoe, lesser horseshoe known to be particularly light-sensitive). However, lighting will only be switched on for short periods and very infrequently during the night-time; therefore, it is considered that there will be very low to negligible impacts anticipated from increased lighting. Lighting from the bathroom will not impact on the internal area of the Roof Space 4.



8. Annexes







Annex 2: Bat Mitigation Plan (July 2021)

