*Nick Tomlinson Ecology*

# Manor Farmhouse, Godmanstone
# Protected Species (bats) Report
## *September 2020*

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## Data Table

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|---|---|
| **Address of Site** | Manor Farmhouse, Church Lane, Godmanstone, Dorset, DT2 7AQ |
| **National Grid Ref.** | SY 6662 9732 |
| **Client Contact Details** | James Best<br>Address as above |
| **Date of Initial Visit** | 21st May 2020 |
| **Date of emergence survey I** | 8th June 2020 |
| **Date of Dawn Return** | 3rd July 2020 |
| **Date of emergence survey II** | 22nd July 2020 |
| **Report Issued** | |
| **Natural England Licence Numbers** | Class Licence WML : CL19 – Registration Number 2015-12965-CLS-CLS<br>Class Licence WML : CL20 – Registration Number 2015-12966-CLS-CLS |

## Executive Summary

1. The survey involved a large detached house, set within its own grounds. The owners wish to convert the southern roof void into residential accommodation.

2. A combination of Phase One (initial) and Phase Two (activity) surveys resulted in the building being characterised as a current and active bat roost for low numbers of brown long-eared bats, with use on a regular (but not necessarily daily) basis.

3. The proposed works will modify the roost, and run the risk (albeit small) of injury or death to any bat(s) that may be present when the works are undertaken.

4. In light of this, and in line with Dorset County Council's Biodiversity Appraisal Protocol, a Biodiversity Plan (BP) has been drawn up and accompanies this report, being an integral part of it, ensuring the development takes into account the needs of the bats.

5. Because an alternative roost is being created (in the adjacent roof void) and the works are planned in such a way as to both maintain Continued Ecological Functionality and to avoid the risk of an offence being committed, a European Protected Species Licence is not required.

## Limitations and Restrictions

a) The area the pipistrelle was seen to go to roost on the dawn survey (Please see Section 4.3.7.4) is not going to be disturbed by these works, so, as the roost will be retained, no mitigation is required.

b) If the design changes, and this area is going to be disturbed, than an experienced ecologist must be engaged to consider the impact of the changes and, if required, issue revised mitigation, which may require the re-submission of the Biodiversity Plan that is an integral part of this report.

## Additional Notes

a) The findings of this report relate to the state of the building as it existed at the time of the survey. If the condition of the building changes significantly then revised survey(s) must be undertaken to assess the impact of those changes on the potential for protected species use of the building.

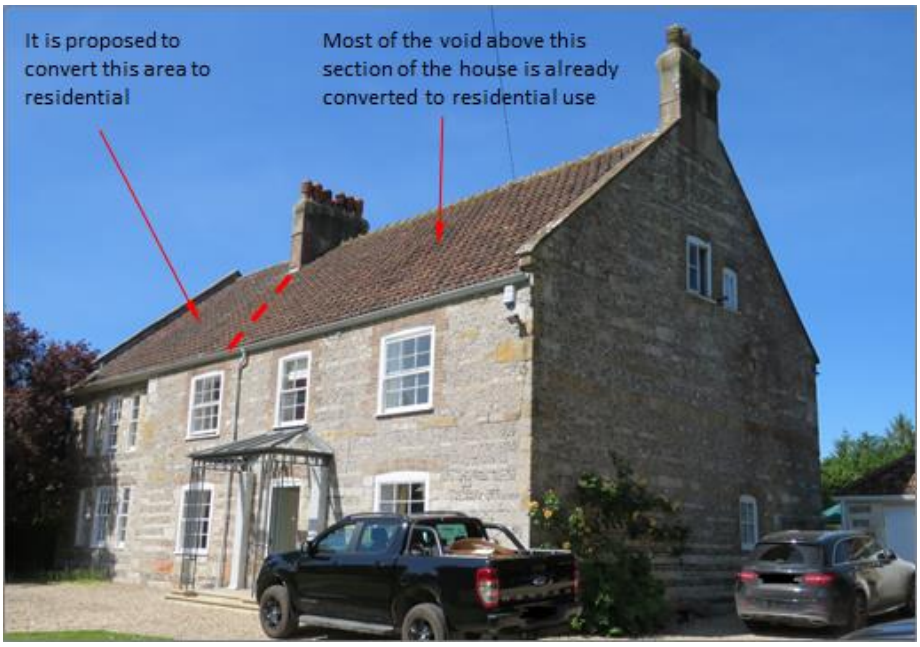
b) In addition, if a significant period of time elapses between the survey and any works, then revised survey(s) must be undertaken to assess if the use of the building by protected species has changed.

c) In any event, if the planned works are not undertaken within two years of the survey date then revised surveys must be undertaken to re-assess the situation.

d) If, at any point during any of the works, bats are found, all work on the area the bat was found in must cease, the area in which the animals have been found made secure, with care taken not to injury the animals when replacing material, and a suitability experienced ecologist engaged. Works must not re-start until the ecologist has had time to assess, and resolve, the situation

# 1. Reason for, and scope of, the Survey

1.1. The survey involved a detached house set within its own grounds (*Please see photograph below*).




1.2. The owners wish to convert the roof void at the southern end to residential accommodation (Please see figure below)

1.3. The purpose of the survey was, therefore, to establish whether the building had been, or currently was being, used by bats[1]. This information can then be used to inform both the planning and development processes, enabling the needs of the protected species to be taken into account together with those of the owners of the property.

## 2. *Survey Programme*

2.1. The surveys were undertaken and/or led by Nick Tomlinson, of Nick Tomlinson Ecology. Nick has over 20 years of experience surveying for bats. A short biography is given in Appendix C.

2.2. A desk top study, using Google Maps and Natural England's MagicMap application, was undertaken to establish the context of the site and the surrounding habitat, and to determine what protected sites might be in the vicinity.

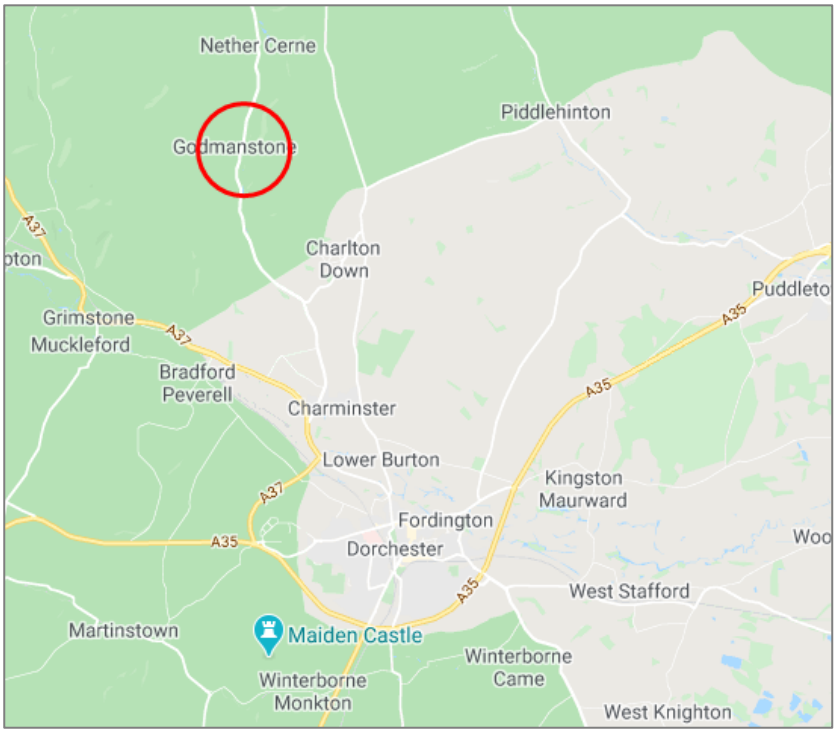
2.3. A data search through the local records centre was undertaken to determine if there were any prior bat records associated with the site and to put the results of any surveys in context.

2.4. A Phase One (Initial) survey took place on the 21st May 2020

2.5. Three Phase Two (activity) surveys were undertaken. One emergence survey (8th June 2020), followed by a dawn return (3rd July 2020) and finally a second emergence survey (22nd July 2020)

[1] *Appendix A gives information on the protection afforded European Protected Species, which includes all species of bats.*

# 3. Site location and surrounding habitat overview




3.1. The property is located in the village of Godmanstone, around 7km north of Dorchester (Please see map to the left, courtesy of Google Maps)

3.2. The following information was obtained through the Natural England's MagicMap application (Please see map below, courtesy of Natural England's Magic Map application, for the sites mentioned)

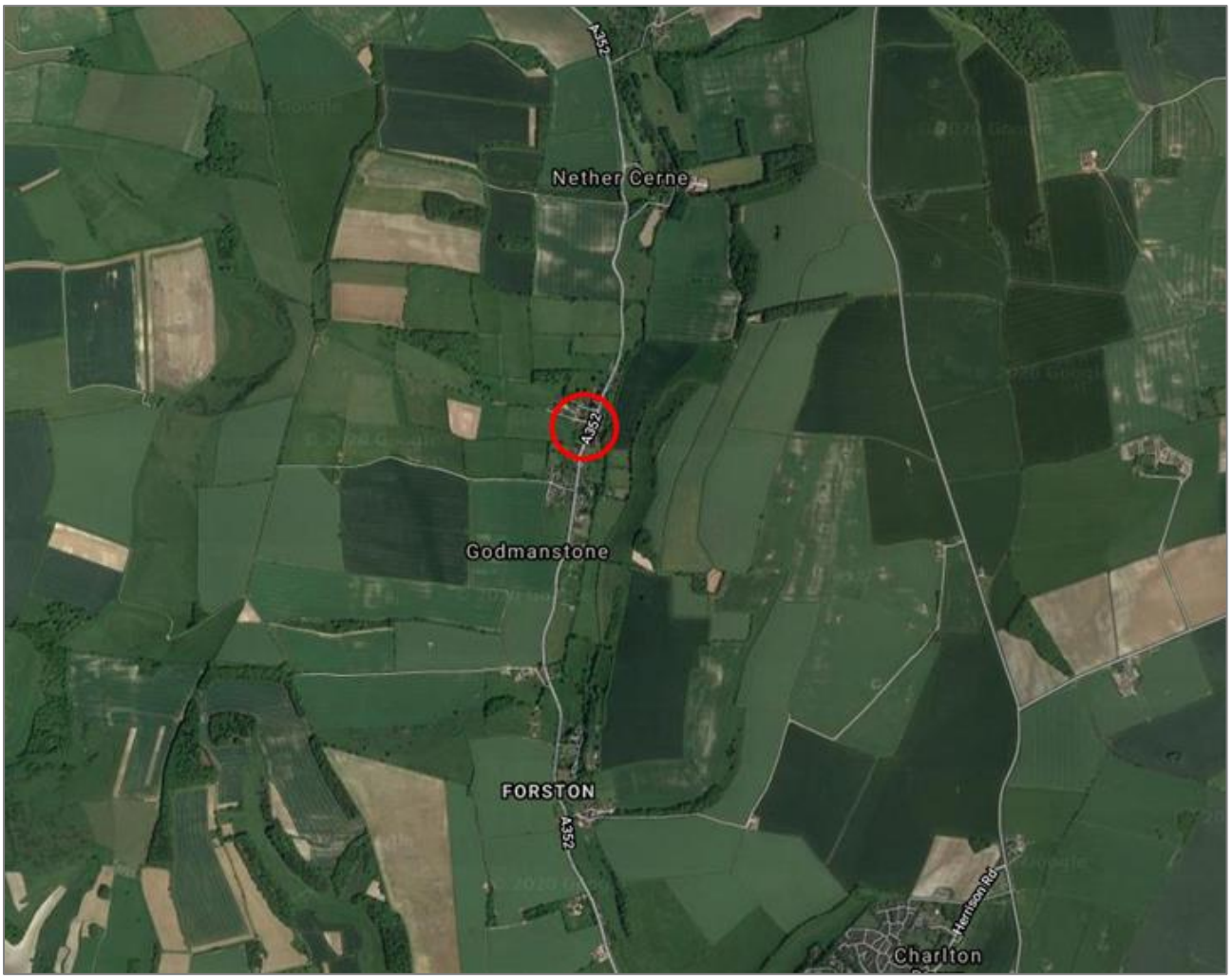
3.2.1. The site lies completely within the Dorset Areas of Outstanding Natural Beauty.

3.2.2. There are no RAMSAR or SPA sites within 5km of the site.

3.2.3. The Cerne and Sydling Downs SAC (purple hatching) lies 4-5 km to the west and north of the site, designated for it grassland, woodland and Marsh Fritillary butterfly.

3.2.4. There are numerous biological SSSIs (green hatching) within 5km of the site (please see map on next page). These sites are largely designated for their grassland interest and none have bats (either species or as a taxa) within their designation

3.3. The landscape around the site is mostly agricultural, with a large arable element. There are a few small, scattered, patches of woodland within 5km of the site. There are several large ponds to the north of the site and the river Cerne flows under 100m to the east. The hedgerows around the site are moderate to sparse but do connect the site well into the wider landscape (*Please see map below, courtesy of Google Maps*).



# 4. Survey Findings

## 4.1. Data Search

4.1.1. The data search, through the Dorset Environmental Records Centre, showed there were 3 known roosts within 2km of the site, including for **serotine** (*eptesicus serotinus*), **long-eared** (*plecotus sp*), **pipistrelle** (*Pipistrellus sp*).

4.1.2. There were no flight records for other species recorded.

## 4.2. Initial (Phase One) Survey (21st May 2020)

4.2.1. The weather on the day was warm, dry and with occasional breezes.

4.2.2. Equipment used included Magenta 5 bat detector, torch, endoscope, binoculars, camera and mirrors (flat and telescopic).

4.2.3. The building was checked internally[2], where appropriate, for evidence of use by bats. The kind of evidence searched for included the actual presence of bats, feeding signs (such as insect wings), or bat droppings, any of which would indicate the use of the site by bats. Whilst the internal surveys were underway a bat detector (Magenta 5), tuned to 45 kHz (and varied periodically), was carried to alert the surveyor to the ultrasonic calls of any bats present.

4.2.4. The external surfaces of the building were checked for potential access points, e.g. cracks, gaps etc, and all surfaces were checked, either directly or through binoculars, for signs that might suggest the use the buildings by bat, including droppings stuck on surfaces, worn or stained gaps or smoothed surfaces surrounding gaps.

4.2.5. The building is a detached, two storey brick, block and stone built structure, set within its own grounds.

4.2.6. The roof voids are split into two sections:

4.2.6.1. Much of the, larger, northern, section has already been converted to residential use, leaving a ridge void approximately 1.5m high, 12m long and 4-5m wide. The tiles are underlain with traditional felt. Much of the void is cobwebbed, suggesting it has not been used by bats.

4.2.6.2. The smaller, southern void does not connect directly into the rest of the building as this section of the house was added at a later date and built on, rather than integrated into, the main house. The void here is between 3 and 4 metres high, 5m long and around 5m wide. The tiles were underlain with traditional felt.

4.2.6.3. Two **brown long-eared bats** (*Plecotus auritus*) was seen in this void. The floor of the void had a considerable spread of droppings with concentrations in two or three places. These were DNA tested (Swift Ecology) and confirmed as brown long-eared.

*[2] All internal inspections took place following the IUCN guidelines (issued May 2020 and updated 19th June 2020), including the wearing of facemask and gloves and the reduction of the time in the roof void to the minimum possible.*

4.2.7. Externally the roof comprises double roman clay tiles. Although much of the roof is tightly laid, there are a number of locations where there are gaps that could give access to the space between the tiles and the felt.

4.2.8. There were also a number of places along the ridge where similar possible access routes existed.

4.2.9. Around the chimney there was small areas of raised flashing and similarly where the roof meets the parapet at the southern end there were some locations where the lead flashing was raised.

4.2.10. The barge boards and soffits are wooden and well-fitting to the building along the front of the house, but there were several locations at the rear where there were gaps that could give access to the space between the boards and the building.

4.2.11. There is a large conservatory (glass walls and roof) on the rear of the property, offering no roosting opportunity.

4.2.12. No signs of bat use were found on the external surfaces of the building

## 4.3. Phase Two Activity Surveys

4.3.1. Two emergence surveys were undertaken (on the 8th June and 22nd July) and one dawn return (3rd July).

4.3.2. Surveys were undertaken in line with the survey guidelines[3], with emergence surveys starting approximately 20 minutes before sunset and continuing until around 90 minutes after sunset and the dawn return starting two hours before sunrise and continuing until around 10 minutes past sunrise.

4.3.3. Surveyors were placed so as to keep all elevations of the building under observation throughout the survey.

4.3.4. Equipment used included magenta Five, Peersonic, Peterson, Elekon Batcsanner and Anabat Explorer detectors, torches and night vision (infrared) equipment as required

4.3.5. The results from these surveys are set out on the following pages.

[3] *Bat Surveys for Professional Ecologists, Good Practice Guideline, Bat Conservation Trust, 3rd Edition, 2016*

### 4.3.6. Emergence Survey (8th June 2020)

4.3.6.1. The weather was calm, dry and with >80% cloud cover. The temperature ranged from 15$^{O}$C at the start of the survey to 11$^{O}$C at the end.

4.3.6.2. An inspection of the roof void prior to the survey found six brown long-eared in situ in the southern void.

4.3.6.3. During the survey five of these were seen to emerge from the area of the roof between the chimney and the eaves at the south western corner of the property, but the exact location was uncertain[4] (*Please see Figure A in Appendix B*).

4.3.6.4. Species recorded in the area during the survey were **serotine** (*Eptesicus serotinus*) **noctule** (*Nyctalus noctula*), **common pipistrelle** (*Pipistrellus pipistrellus*) and **soprano pipistrelle** (*P. pygmaeus*)

### 4.3.7. Dawn Return (3rd July 2020)

4.3.7.1. The weather was dry, with a slight breeze (occasional gusts) and c80% cloud cover. The temperature ranged from 13$^{O}$C at the start of the survey to 10$^{O}$C at the end.

4.3.7.2. Four long-eared bats (assumed, based on prior work, to be brown long-eared) were seen swarming around the southern end of the building, with a focus on the south-western gable end between 03:51 and 04:32 (*Please see Figure B, in Appendix B*).

4.3.7.3. At the end of this period of time the bats were seen to leave the area and were not seen to return, so are assumed to have roosted elsewhere on that occasion.

4.3.7.4. One common pipistrelle was seen to enter the roof adjacent to the southern chimney block at 04:42 (*Please see Figure C, in Appendix* B)

4.3.7.5. An internal inspection of the roof void later that day found one brown long-eared in situ.

4.3.7.6. Species recorded in the area during the survey were serotine, noctule, common pipistrelle, soprano pipistrelle and a Myotis bat, species uncertain but probably **Natterer's** (*Myotis nattereri*)

*[4] The night vision camera had failed to record properly so, although the bats were seen upon emergence the exact location of the access point is uncertain.*

### 4.3.8. Emergence survey (22nd July 2020

4.3.8.1. The weather was dry, with a slight breeze (occasional gusts) and <20% cloud cover. The temperature ranged from 20$^{O}$C at the start of the survey to 12$^{O}$C at the end.

4.3.8.2. An internal inspection of the roof void prior to the survey found four brown long-eared bats in situ.

4.3.8.3. Bat droppings were found under the glass porch on the front of the building and pone common pipistrelle was seen roosting behind the metal supports of this structure (*Please see Figure D, in Appendix B*)

4.3.8.4. Four long-eared bats (assumed to be brown long-eared based on prior work) were seen to emerge from the gable end that had been the focus of the dawn swarming seen on the previous survey (*Please see Figure E, in Appendix B*).

4.3.8.5. Species recorded in the area during the survey were serotine, noctule, common pipistrelle, soprano pipistrelle.

# 5. Discussion

5.1. Clearly the southern roof void has been used by bats in the past, as droppings were found on the Phase One survey. It is not easy to reliably age bat droppings, as they deteriorate at different rates, depending on conditions but, given the number of droppings, the roost is believed to have been established for a number of years.

5.2. The results of the activity surveys undertaken clearly indicate the roof void is in current use, with numbers varying between one and five brown long-eared bats. Given the activity witnessed on the dawn swarming, when bats interacted with the entrance, but then left to roost elsewhere for the day, it is possible that this group of bats do not use this roost on a daily basis.

*5.3. The overall characterisation of the southern roof void is, therefore, a current and active roost for low numbers of brown long-eared bats, with use on a regular (but not necessarily daily) basis.*

5.4. Given the relatively consistent numbers of bats across the surveys (even if, on one occasion, most of them roosted elsewhere) and the lack of evidence of young bats in the roof void, it is believed this is, most likely, a male summer roost[5].

5.5. The proposed works will modify the roost, as the void will be converted to residential use.

5.6. In order to undertake the proposed works mitigation will be required, as well as safe working methods to ensure bats are not harmed by the works, or their Continued Ecological Functionality, CEF, impaired.

5.7. The concept of CEF includes the idea that a bat must be able to use a roost in the way, and at the time, that it requires to, in order to fulfil its ecological needs. Works on a roost must therefore be undertaken in such a way as to ensure roosting opportunities are continually available when the bat needs them.

5.8. In the case of the proposed works, restricting the works on the southern roof void to the period from late October to late April[6], together with the creation of a replacement roost in the northern roof void prior to the works on the southern roof void beginning, will ensure CEF is maintained.

[5] *Speakman (**Minimum summer populations and densities of bats in N.E. Scotland, near the northern borders of their distributions**) found most maternity roosts did contain some males (making up between 0% and 52% of the bats present) but he did find one roost, out of twelve, that was occupied solely by (5) males, suggesting that, while not common, such roosts do exist.*

[6] *This is because the bats are assumed to be in hibernation at a different location at this time (Dietz and Helverson, state that brown long-eared bats prefer underground roosts in winter). With the works completed by late spring, the roost will also be available for them to use when they emerges from hibernation.*

5.9. In order to capture these conditions and safe working practices, and in line with Dorset County Council's Biodiversity Appraisal Protocol[7], a Biodiversity Plan (BP) has been drawn up and accompanies this report, being an integral part of it.

5.10. The BP ensures the development takes into account the needs of the bats, including:-

5.10.1. Timing restrictions on when the works can take place,

5.10.2. Safe working practices to ensure bats are not harmed by the works,

5.10.3. The implementation of appropriate mitigation to ensure the bats are able to occupy the building once the works are complete.

5.11. A final consideration is whether the works required a European Protected Species Licence, EPSL.

5.12. The offences under the legislation (*Please see appendix A for more information*) involve the disturbance/injury or death of bats and the destruction/obstruction/damage to a roost.

5.13. When undertaking works on a bat roost that may result in one of these offences being committed an EPSL is often required.

5.14. Natural England's Mitigation Guidelines, however, state that if the works can be undertaken in such a way, or at such a time, that an offence under the regulations is not committed[8] then an EPSL may not be required.

5.15. As noted above, the works will be restricted to the period when the bats are unlikely to be present (October to April) so no bats will be disturbed, and a replacement roost will be created in the northern roof void prior to the works on the southern roof void taking place, so ensuring roosting opportunities are maintained and available.

5.16. In light of this no European Protected Species Licence will be required in this instance

[7] https://www.dorsetcouncil.gov.uk/countryside-coast-parks/countryside-management/biodiversity/biodiversity-appraisal-in-dorset.aspx

[8] *Section 2.2.1, Bat Mitigation Guidelines, Natural England, 2004.*

# *Appendix A : Legal Protection of European Protected Species*

*NB: The species listed below are a sample taken from the schedules in the named Legislation, for a full listing, and full details of the protection afforded them, reference should be made to the relevant legislation.*

A. *Annex IV(a) of the Habitats Directive lists a range of animals (European Protected Species) afforded special protection due to their conservation status.*

B. *That protection is transcribed into domestic legislation as The Conservation of Habitats and Species Regulations 2017), with all species of British bat listed on Schedule 2, as are the dormouse, sand lizard, great crested newt, smooth snake and otter. In addition the Wildlife and Countryside Act 1981 (as amended) affords additional protection.*

C. *Taken together this legislation makes it illegal to :-*

   i. *Deliberately capture (take), injure or kill a European Protected Species*

   ii. *Deliberately disturb a European Protected Species*

   iii. *Damage or destroy a breeding site or resting place of a European Protected Species*

D. *The protection of a breeding or resting place applies whether it is being used or not*

E. *The place a bat uses to breed or rest is often referred to as a roost. That term does not exist in the legislation but, for the purposes of discussion, roost should be taken to represent a place a bat uses to breed or rest.*

F. *For the purposes of this legislation disturbance is defined as impairing the ability of a European Protected Species to :-*

   i. *Survive, breed or reproduce, or to rear and nurture their young*

   ii. *Hibernate or migrate*

   *or to*

   iii. *Affect significantly the local distribution or abundance of the species*

G. *The key threats facing populations of these animals remain loss of feeding habitat and breeding/resting opportunities. The legislation outlined above aims, therefore, to protect all European Protected Species and to ensure that their needs are taken into account when* development takes place.

## *Appendix B : Selected Figures and Photographs*

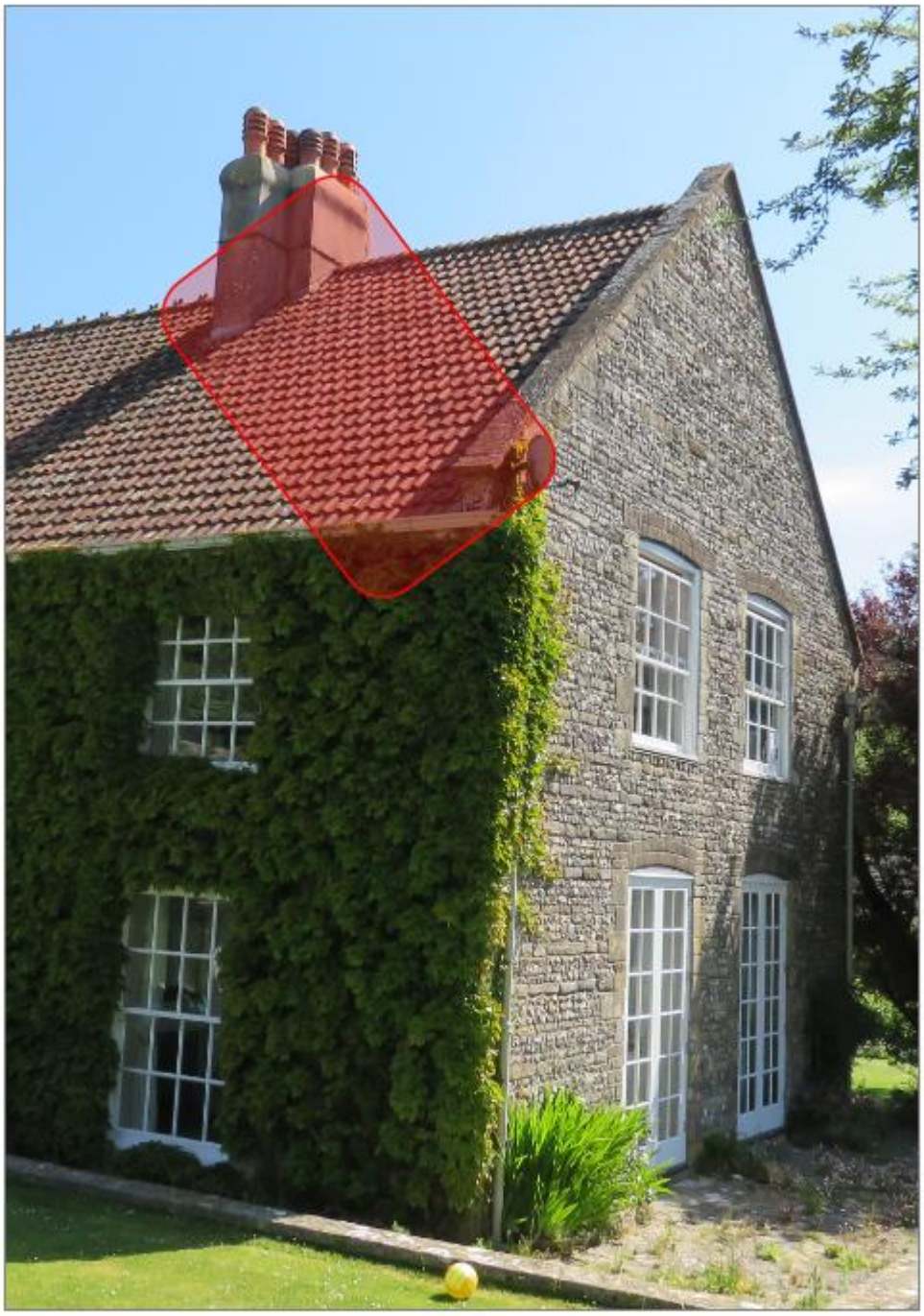


Figure A: Area within which brown long-eared bats were believed to have emerged during emergence survey on 8th June 2020

## *Appendix B : Selected Figures and Photographs (cont….)*

Figure B: Focus of brown long-eared bats swarming during dawn return survey on 3rd July 2020

## *Appendix B : Selected Figures and Photographs (cont….)*

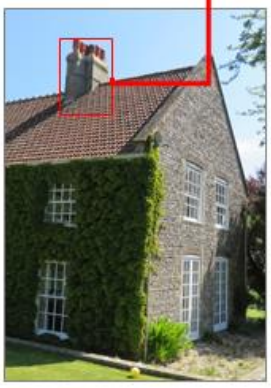


Figure C: Location where common pipistrelle was seen to enter the roof on dawn return survey on 3rd July 2020

## *Appendix B : Selected Figures and Photographs (cont….)*

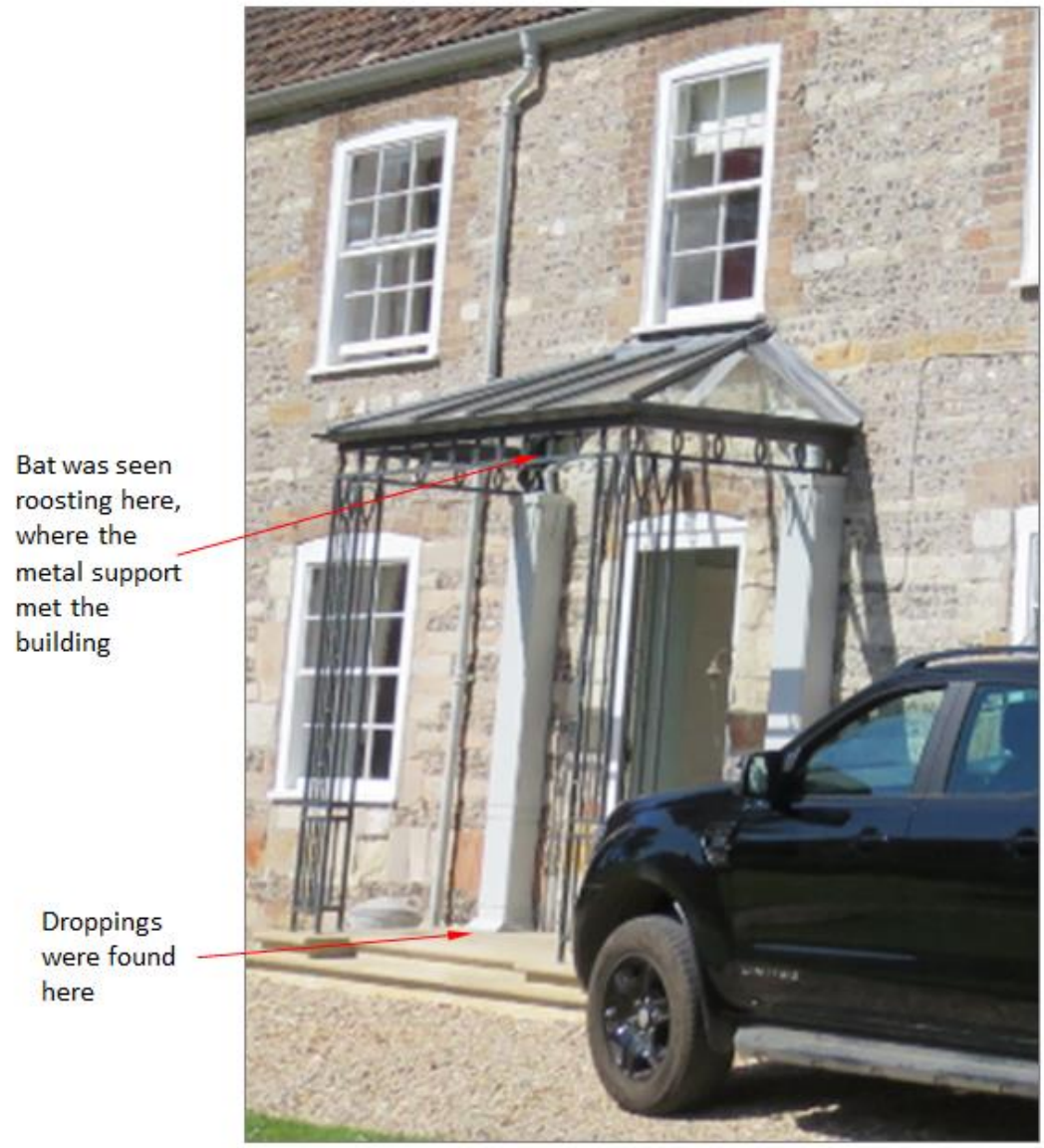



Figure D: Location where common pipistrelle was seen to emerge from on emergence survey on 22nd July 2020

## *Appendix B : Selected Figures and Photographs (cont….)*


Figure E: Location where long-eared bats were seen to emerge from on emergence survey on 22nd July 2020

# *Appendix C : Nick Tomlinson : Short Biography*

Nick's employment history includes one year working for the Bat Conservation Trust, seven years managing a nature reserve for the Royal Society for the Protection of Birds and three years each working for the Dorset and Somerset Wildlife Trusts.

Nick has been involved with bat work in Dorset and Somerset for over 20 years and holds both CL19 and CL20 Natural England licences. He has held a number of Natural England mitigation licences and undertaken a large number of commercial projects to inform development proposals, including:-

- **Building/structure surveys:**

- **Activity surveys:** Dawn returns, dusk emergence, transects etc

- **Activity mapping:** Including the deployment of static detectors and night vision equipment, and the subsequent analysis of the results, and the use of harp traps, mist nets, acoustic lures and radio tracking to understand landscape use.

- **Development of Mitigation Plans**, including conversions, extensions, re-roofing, temporary roost exclusion, new roost creation (enhancement) and post-development surveys, undertaken under method statements approved as part of the planning process within Dorset and through European Protected Species Licences.

- **Species worked on:** Lesser horseshoe, greater horseshoe, Natterer's, whiskered, common pipistrelle, soprano pipistrelle, brown long-eared and serotine.

Nick also undertakes a number of research projects, focussed on the rarer bat species, including Bechstein's, barbastelle and grey long-eared, and is personally licenced to undertake bat research using harp traps, mist nets and acoustic lures and is licenced to fur clip, ring and radio track bats.

Nick runs an ongoing training programme in Dorset, is a south west regional trainer for the Bat Conservation Trust and tutor on the Trust's Advanced Trapping Techniques Course. Nick is also bat recorder verifier for Dorset.