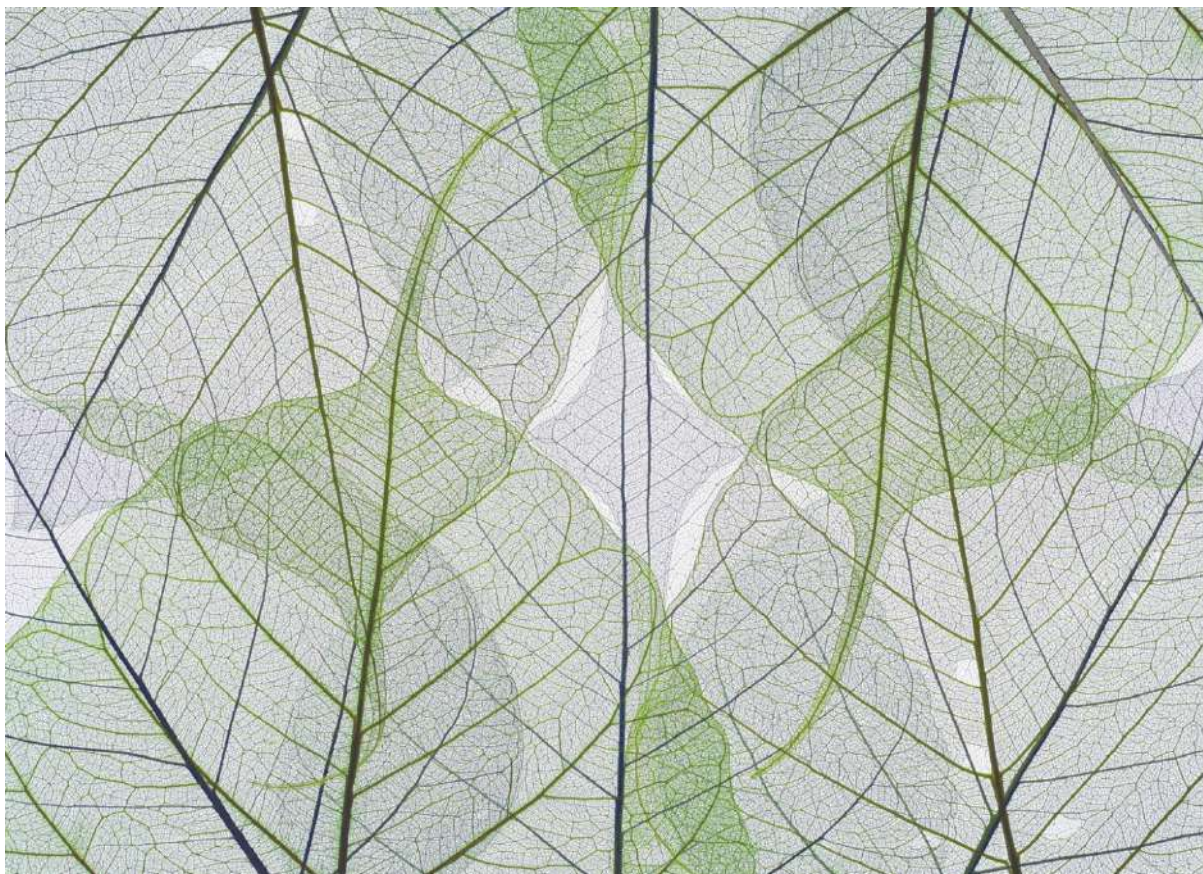




Tata Steel UK Ltd

Llanwern Hot Mill

Preliminary Roost Assessment and Bat Hibernation
Survey of the Motor Room

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RSK GENERAL NOTES

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EXECUTIVE SUMMARY

RSK Biocensus were appointed by Tata Steel, as a follow up from a previous external preliminary bat roost assessment (PRA), to carry out an internal inspection and bat hibernation survey of the Motor Room and its basement within the Hot Mill building. The Motor Room is approximately 760m long by 30 m wide (c. 3ha) and the basement spans under the entire area. The Motor Room forms a part of the Hot Mill building and is located along the southern elevation.

The site is located within the Tata Steelworks, North of Queensway, Llanwern, Newport, South Wales (central grid ref: ST 37619 86666).

The previous PRA survey of 28 buildings within the northern area of the former steelworks was carried out during March 2024. The Hot Mill building was deemed to have 'moderate bat roosting suitability' and further surveys were recommended. As the building has a basement that may be accessed by bats, it was deemed to have hibernation potential. The Motor Room and basement, within the Hot Mill building, could not be internally inspected at the time due to asbestos and other access related issues. Therefore, further surveys of the Motor Room and basement were recommended once safe access could be permitted.

The PRA internal inspection was carried out on 12 December 2024, and the bat hibernation survey was undertaken by deployment of static bat detectors and temperature/humidity dataloggers between the 12 December 2024 and 07 March 2025.

The building is well-lit overnight in most areas and this reduces the roosting suitability for bats. External features were found in the form of gaps in-between external corrugated metal sheet walls, gaps between brick walls and asbestos sheets. Internal features were found in the two two-storey internal buildings which were unlit and had potential bat flight access through square ventilation holes (unsealed holes approx. 50cm²) in the walls. Hibernation potential was identified in the form of the basement which offers some darker areas and internal crevices.

During the internal inspection, two dead bats (likely to be pipistrelle species and a brown long-eared bat) were found in two different locations of the building. No other conclusive evidence of bats was found (note limitations due to size and complexity of building). Occasional moth wings were identified on floor, but there were no concentrations to suggest evidence of bat feeding perches. Remains of at least ten dead birds and one dead cat were also found inside the building.

Four static bat detectors and two temperature/humidity data loggers were deployed within the Motor Room and its basement between 12 December 2024 and 07 March 2025.

Common pipistrelle and brown long-eared bats were recorded inside the building. The brown long eared bats and the majority of the common pipistrelle bat recordings were captured at first floor level. Six recordings of common pipistrelle were captured in the basement during 25 January 2025. Two recordings of brown long-eared and 319 recordings were made of common pipistrelle.

Data loggers comparing the first floor to the basement showed that the basement is generally a bit warmer (lowest temp 5.5°C with an average of 7.9°C) than the location measured at the first floor (lowest temp 2°C with an average of 6.8°C), while the humidity was similar for both

locations (lowest approx. 62% at both levels with an average of 80.5% for the basement and 84.6% for the first floor).

Recommendations for further surveys of the Hot Mill building in the form of dusk emergence, nighttime bat walkover and static bat detector deployment have been made in section 5.

Due to the bat calls recorded within the building over the winter, the Hot Mill building is considered likely to be a roost with hibernation potential for a small number of common pipistrelle and brown long eared bats. Therefore, a European Protected Species (EPS) licence will be required from Natural Resources Wales (NRW) prior to works.

There is a possibility that further bat emergence surveys planned for summer 2025 may identify further roosts, if so these would also need to be considered within the licence application. Timings and methods of works will need to be considered as part of mitigation required under licence, to avoid impact to bats.

1 INTRODUCTION

1.1 Background information

- 1.1.1 RSK Biocensus were previously appointed by Tata Steel to carry out a preliminary roost assessment (PRA) for bats of 28 buildings within the northern area of the former steelworks at Llanwern, Newport during March 2024. This included the very large 'Hot Mill' building.
- 1.1.2 The Hot Mill building was deemed to have 'moderate bat roosting suitability' and further surveys were recommended. As the building has a basement that may be accessible to bats, it was deemed to have hibernation potential.
- 1.1.3 The Motor Room and basement, within the Hot Mill building, could not be internally inspected at the time due to asbestos and other access related issues. Therefore, further surveys of the Motor Room and basement were recommended once safe access could be permitted.
- 1.1.4 This report and findings cover the Motor room section only, unless otherwise stated.

1.2 Purpose of this report

- 1.2.1 As a follow up to the previous PRA bat survey, RSK Biocensus were subsequently appointed by Tata Steel to carry out an internal inspection and bat hibernation survey of the first floor Motor Room and its basement within the Hot Mill building.
- 1.2.2 The Motor Room is approximately 760m long by 30 m wide (c. 3ha) and the basement spans under the entire area.
- 1.2.3 The survey area is the Motor Room building (part of the Hot Mill building) marked within the red-line boundary (hereafter referred to as 'the site'). The site location and outline of the buildings are shown in Figure 1 and 2.
- 1.2.4 The PRA internal inspection was carried out on 12 December 2024, and the bat hibernation survey was undertaken by deployment of static bat detectors and temperature/humidity dataloggers between the 12 December 2024 and 07 March 2025.
- 1.2.5 This report presents the results of both the PRA and bat hibernation survey. The surveys were undertaken to assess the internal potential of the Motor Room for roosting bats (including hibernation), inform further survey requirements and to inform the design of mitigation that may be required.

1.3 Proposed development

- 1.3.1 Demolition of the Hot Mill will be carried out under permitted development. A large part of the Hot Mill building, including the Motor Room and basement will be dismantled and demolished. The timescales for the proposed demolition works are currently unknown.

1.4 Landscape context

- 1.4.1 The site is located within the Tata Steelworks, North of Queensway, Llanwern, Newport, South Wales (central grid ref: ST 37713 86633).
- 1.4.2 The habitat surrounding the Hot Mill building is dominated by bare ground and ephemeral/ruderal habitat with hard standing, buildings and other structures forming part of the former steelworks. There is little semi natural habitat other than patches of scrub and short ephemeral perennial vegetation where plants have begun to colonize hard standing and mounds of ash and slag resulting from the steel processing process. Waterbodies include an ornamental pond and settlement tanks for treatment of oil effluents. There is also a dry lagoon (Lagoon 29) which contains ferrous sludge waste.
- 1.4.3 The site is immediately bordered to the north by Tata exchange railway sidings, which are separated from the mainline railway by a (c. 100m wide) woodland strip. Agricultural farmland and large areas of plantation woodland lie further north. To the east lies the rest of the steel works site and to the west lies 'brownfield' land (currently under development). The A4180 borders the southern edge of the site. Further south lies further Tata operational land and then the coastal floodplain grassland and associated ditches of the Gwent Levels. The Severn Estuary is located approximately 3km to the south.
- 1.4.4 The site features areas of habitat suitable for foraging by a range of bat species. Specifically, the dry lagoon in the north, channels and areas of grassland around the operational areas of the site. In the vicinity of the site there are blocks of woodland, with coastal grazing marsh to the south of the site.

1.5 Legislation

- 1.5.1 Table 1 below provides a summary of the legislation considered in this assessment.

Table 1 : Legislation considered in this assessment

Legislation/ Source	Notes
The Conservation of Habitats and Species Regulations (Habitats Regulations) 2017 (as amended)	Affords protection to certain species and habitats listed on the relevant schedules.
The Wildlife and Countryside Act (WCA) 1981 (as amended)	
The Natural Environment and Rural Communities (NERC) Act 2006	Places a duty on planning authorities to consider habitats and species of principal importance in planning applications.

2 METHODOLOGY

2.1 Preliminary Bat Roost Assessment

- 2.1.1 The preliminary bat roost assessment of the Motor Room was carried out on 12 December 2024 by staff reference number TC47. This member of staff holds a bat licence (NRW ref no: S092623/1), is a full member of the Chartered Institute of Ecologists and Environmental Management (CIEEM) and has over thirteen years' experience of undertaking bat survey work.
- 2.1.2 The Motor Room within the Hot Mill building was assessed internally to ascertain suitability for roosting bats, taking account of the following factors that influence the likelihood of bats roosting:
- Surrounding habitat and land use.
 - Construction detail, structure condition and internal conditions.
 - Potential bat-access points.
 - Number and quality of potential roosting features (PRF).
 - Visual, systematic inspections for bats and evidence of bats.
- 2.1.3 The potential of the building/s to support roosting bats was then categorised as defined in Table 2, based on guidance from the bat conservation trust (Collins, 2023).

Table 2: Categorisation of the suitability of structures for roosting bats and suitability of habitats for foraging and commuting bats (Collins, 2023)

Potential suitability	Description
	Roosting habitats in structures
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/ suitable shelter at all ground/ underground levels).
Negligible suitability	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low suitability	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/ or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/ stable hibernation site but could be used by individual hibernating bats).
Moderate suitability	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely for a roost of high conservation status (with respect to roost type only - the categorisation in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High suitability	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts e.g. maternity or classic cool/ stable hibernation site.
Confirmed roost	Bats or evidence of bats recorded during the surveys. A confirmed record (supplied by records centre/local bat group) would also apply.

2.2 Hibernation Survey

- 2.2.1 Four SM4 Bat-FS static bat detectors (Wildlife Acoustics) and two EasyLog USB temperature/humidity loggers were deployed within the Motor Room and its basement between 12 December 2024 and 07 March 2025 by staff member TC47. They were located in areas considered most likely to be suitable for bats. The locations are shown in Figure 4.
- 2.2.2 Batteries and SD cards were checked and replaced on 20 January 2025 by staff reference number PM65.

Location of statics and dataloggers

- Static 1 and Datalogger 2 were positioned on the stairs near centre of the main part of the building. Set at height to capture bats flying internally above machinery. The room is generally quite light with lights on 24/7 so this location seemed best to cover largest area.
- Static 2 was positioned inside the two-storey internal building, in a dark area of the building.
- Static 3 was positioned in the basement on the western end, in a dark area next to where one dead bat (*Pipistrelle* sp.) was found on the floor.
- Static 4 and Datalogger 1 were positioned in the eastern half of the basement, in a dark area.

2.3 Sound Analysis of Hibernation Results

- 2.3.1 Bat call data was analysed using Kaleidoscope Lite version 5.7.0 software by staff reference number EK18, who has more than 20 years' experience in professional bat sound analysis.

2.4 Survey limitations

- 2.4.1 Due to the very large size of the building, it was not possible to inspect every crevice or feature. Internal floors were covered with dust and oil in some parts, so evidence of bats may have been missed.
- 2.4.2 Multiple small rooms off the main basement could not be safely entered. In the basement, due to oil and live electricity cabinets, the survey was conducted from designated walkways in the centre of the basement. Approximately 75% of floor areas were visible from the designated walkways.
- 2.4.3 Open recesses on southern and eastern external elevations could not be safely accessed due to machinery present.
- 2.4.4 The Motor Room forms part of the Hot Mill building, but only the motor room was asked to be surveyed as part of these works.

2.5 Validity of data

- 2.5.1 In accordance with CIEEM guidance (CIEEM, 2019), unless the site changes significantly, the desk study and field surveys carried out to inform this report should remain valid for at least 18 months. After this time, a suitably experienced ecologist would need to reassess the site to determine if the results remained valid, up to a maximum of three years [national and local policy may differ on survey validity].

3 RESULTS

3.1 Preliminary Roost Assessment of Motor Room

Description of Motor Room

- 3.1.1 The Motor Room is the southern half of the Hot Mill building. Within the northern part of this building is the actual 'hot mill' (which is where metal was 'rolled' to reduce thickness). The parts of the building to the west and south-west of the Motor Room are the covered rail transportation wings, these are all housed in the same structure as the Motor Room.
- 3.1.2 Externally, the Motor Room is approximately four storeys high, with corrugated metal and asbestos sheeting. Recesses were present on the southern and eastern elevations, with machinery present. Unsealed square ventilation holes were present in some of these recesses, which lead into the interior.
- 3.1.3 Internally, the Motor Room is a single room, running the height and length of the building (c. 760m long). It houses large motor engines that used to drive the machines in the 'hot mill' and banks of electrical cabinets.
- 3.1.4 Internal buildings were built of brick and concrete block, and all had flat roofs. There were nine internal buildings present within the Motor Room, seven single-storey and two two-storey buildings. The two storey buildings were used for ventilation, and large ducts were present on their roofs.
- 3.1.5 The Motor Room was largely sealed inside with asbestos boards on walls, with corrugated asbestos and metal sheet roof. Some of the asbestos boards had fallen or had been removed, leaving gaps which show the external metal sheet walls. On the northern elevation, gaps were present around the steel structural beams which lead into the 'hot mill'.
- 3.1.6 Lighting is on constantly in most areas of the building, with the main first floor room fairly well-lit, and the basement having some sections that are well-lit and some that are unlit. The two storey ventilation buildings were not lit internally. Site works were suspended in 2016, and until early 2023 the lights were only on when in use. However, lights have been left on since 2023 to secure the site and motion light detectors have been installed for additional security.
- 3.1.7 The basement runs the length of the building (c. 760m), and is largely a single room, primarily full of ducting and engineering cabinets. There were a small number of electrical rooms leading off from the basement, which could not be accessed due to live electric cabinets.

Evidence of bats

- 3.1.8 Two dead bats were found in two different locations of the building, see Figure 4 for approximate location.
- 3.1.9 One of the dead bats, identified as a long-eared species, most likely brown long-eared (*Plecotus auritus*), was found on a wire mesh cage beside a single storey internal

building at the south-east corner of the Motor Room. No other evidence e.g. bat droppings, were found nearby.

- 3.1.10 A second dead bat (a pipistrelle species) was found on the floor in the basement, near the western end of the building. No other evidence e.g. bat droppings, were found nearby.
- 3.1.11 No other conclusive evidence of bats was found (noting limitations due to size and complexity of building). Occasional moth wings were identified on floor, but there were no concentrations to suggest evidence of bat feeding perches.
- 3.1.12 Remains of at least ten dead birds and one dead cat were also found inside the building.

Bat Roosting Suitability

- 3.1.13 The building is well-lit overnight in most areas and this reduces the roosting suitability for bats.
- 3.1.14 External features were found in the form of gaps in-between external corrugated metal sheet walls, gaps between brick walls and asbestos sheets.
- 3.1.15 Internal features were found in the two two-storey internal buildings which were unlit and had potential bat flight access through square ventilation holes (unsealed holes approx. 50cm²) in the walls.
- 3.1.16 Hibernation potential was identified in the form of the basement which offers some darker areas and internal crevices.

Hibernation Survey Results

- 3.1.17 Four static bat detectors were deployed during the dates 12/12/2024 - 07/03/2025, with an SD card and battery change 20/01/2025.
- 3.1.18 Static detectors 1-2 were located at first floor level, while Static detectors 3-4 were located in the basement.
- 3.1.19 Common pipistrelle (*Pipistrellus pipistrellus*) and brown long-eared bats (*Plecotus auritus*) were recorded inside the building. The brown long eared bats and the majority of the common pipistrelle bat recordings were captured at first floor level. Six recordings of common pipistrelle were captured in the basement during 25 January 2025.

Table 3: Static bat detector deployment 12/12/2024 - 07/03/2025

Static No	Species	No of 5 sec recordings
Static 1	Common pipistrelle	276
Static 1	Brown long-eared	2
Static 2	Common pipistrelle	38
Static 3	Common pipistrelle	6
Static 4	No bat calls	N/A

Table 4: Bat recordings per date, time and species

Recording dates	Static number	Times	Species	No of 5 sec recordings
24/12/2024	Static 1	16:52	Brown long-eared	1

25/12/2024	Static 1	15:38-22:12	Common pipistrelle	162
01/01/2025	Static 1	05:43	Common pipistrelle	1
05/01/2025	Static 1	21:50	Brown long-eared	1
25/01/2025	Static 3	00:19-00:25	Common pipistrelle	6
31/01/2025	Static 2	17:43	Common pipistrelle	1
01/02/2025	Static 1	22:34-22:55	Common pipistrelle	3
03/02/2025	Static 1	16:34-18:46	Common pipistrelle	111
03/02/2025	Static 2	17:55	Common pipistrelle	1
11/02/2025	Static 2	18:14-19:06	Common pipistrelle	34
Total				321

Weather Conditions - During Bat Activity

- 3.1.20 A historical weather forecast for Llanwern has been created from the website www.timeanddate.com. Ideal weather conditions for bat activity are generally considered as overnight temperatures above 10°C, less than 15 mph wind speed and no overnight rain.
- 3.1.21 However, during the winter bats may wake up for hibernation and do some foraging during mild weather conditions. They may also be active when looking for a place to hibernate or moving from one hibernation roost to another.
- 3.1.22 Brown long eared bats are considered likely to hibernate when the temperature is below freezing (0°C), although the temperature outside was recorded at 0°C at the beginning and end of January (see table 5 below).
- 3.1.23 The temperature range for Llanwern was 3-13°C during the month of December (12/12/2025 onwards), -4-13°C during the month of January, -1-10°C during the month of February and -2-12°C during the month of March (until 07/03/2025).
- 3.1.24 The table below shows the weather conditions during the dates when bats were recorded only.

Table 5: Overnight weather during bat activity (see table 4)

Date	Sunset and Sunrise time	Temperature (Celsius)	Wind speed (miles per hour)	Humidity (percentage)
24/12/2025	16:06 - 08:07	9 - 10°C	7 - 13 mph	100 - 100%
25/12/2024	16:06 - 08:07	5 - 9°C	0 - 9 mph	93 - 100%
01/01/2025	16:13 - 08:17	0 - 7°C	5 - 13 mph	81 - 100%
05/01/2025	16:16 - 08:16	4 - 12°C	7 - 22 mph	88 - 100%
25/01/2025	16:46 - 07:59	5 - 6°C	6 - 20 mph	76 - 93%
31/01/2025	16:57 - 07:51	1 - 7°C	1 - 6 mph	76 - 93%
01/02/2025	17:01 - 07:48	6 - 7°C	8 - 14 mph	81 - 93%
03/02/2025	17:04 - 07:45	7 - 8°C	3 - 10 mph	76 - 87%
11/02/2025	17:17 - 07:52	4 - 4 °C	5 - 12 mph	87 - 93%

Data Logger Results

- 3.1.25 Datalogger 1 was positioned in the basement, while Datalogger 2 was positioned at first floor level.
- 3.1.26 See Figure 3 for location of statics and dataloggers
- 3.1.27 Data loggers comparing the first floor to the basement showed that the basement is generally a bit warmer (lowest temp 5.5°C with an average of 7.9°C) than the location measured at the first floor (lowest temp 2°C with an average of 6.8°C), while the humidity is broadly similar in both locations (lowest approx. 62% at both levels with an average of 80.5% for the basement and 84.6% for the first floor).

Table 6: Temperature and Humidity Datalogger Results (12/12/2024 - 07/03/2025)

Datalogger	Location	Temperature (Celsius)	Average temperature	Humidity (percentage)	Average humidity
Datalogger 1	Basement	5.5 - 18°C	7.9°C	62 - 100%	80.5%
Datalogger 2	First floor	2 - 18.5°C	6.8°C	61.5 - 99%	84.6%

- 3.1.28 See Appendix 2-3 for graphs showing the data logger results.

3.2 Other species - nesting birds

- 3.2.1 The building offers nesting opportunities for birds such as feral pigeons, corvids (such as jackdaw) and Peregrine falcon (a Peregrine falcon was identified roosting on the roof of the Hot Mill building during the PRA survey in March 2024¹).
- 3.2.2 Two storey internal buildings on southern elevation - evidence of birds attempting to nest in these buildings (likely feral pigeon but also corvids). At least ten dead birds were found within the Motor Room, presumed likely due to becoming lost and trapped within one of many of the internal rooms.
- 3.2.3 Breeding bird surveys of the Hot Mill building are planned to be carried out between March and July 2025.

¹ RSK Biocensus (2024) *Llanwern: Northern Site - Preliminary Bat Roost Assessment*. 2486598. RSK Biocensus, Cardiff.

4 EVALUATION

4.1 Internal Inspection

- 4.1.1 The building is well-lit overnight in most areas and this reduces the roosting suitability for bats.
- 4.1.2 External features were found in the form of gaps in-between external corrugated metal sheet walls, gaps between brick walls and asbestos sheets.
- 4.1.3 Internal features were found in the two two-storey internal buildings which were unlit and had potential bat flight access through square ventilation holes (unsealed holes approx. 50cm²) in the walls.
- 4.1.4 Hibernation potential was identified in the form of the basement which offers some darker areas and internal crevices.

4.2 Hibernating Bats

- 4.2.1 Common pipistrelle were recorded inside the building on eight nights between 25th December and 11th February, whilst brown long-eared were recorded on two nights between 25th December and 5th January.
- 4.2.2 There were two recordings of brown long-eared and 319 recordings of common pipistrelle from these dates.
- 4.2.3 The brown long eared bats and the majority of the common pipistrelle bat recordings were captured at first floor level. Six recordings of common pipistrelle were captured in the basement (on Static 3) during 25 January 2025.
- 4.2.4 As a general rule of thumb an ideal hibernaculum for most British bat species would hold a stable temperature of 0-6°C and a humidity of close to 100%, while Lesser and Greater Horseshoe bats prefer higher temperatures compared to other species of about 6-10°C (BCT, 2025).
- 4.2.5 If the internal temperatures drop below frost this may be dangerous for a hibernating bat which will then need to move to another roost, although some species may tolerate down to -4°C (Dietz *et al.* 2009). Conversely, if the temperatures inside the hibernacula are too warm it is likely to cause most bats to wake up from their hibernation and lose the ability to store their energy reserves.
- 4.2.6 Data loggers comparing the first floor to the basement showed that the basement is generally a bit warmer (lowest temp 5.5°C with an average of 7.9°C) than the location measured at the first floor (lowest temp 2°C with an average of 6.8°C), while the humidity (lowest approx. 62% at both levels with an average of 80.5% for the basement and 84.6% for the first floor) is on the low side for an ideal hibernaculum.
- 4.2.7 However, the dataloggers only monitored temperature and humidity over small areas in a vast building, and it is likely that there are areas within the wider Hot Mill where conditions are optimal for hibernation. As there is evidence of bats using the interior of the hot mill including two dead bats (pipistrelle species and brown long-eared), and consistent activity over the winter months, the evidence suggests that bats are roosting

within the building, particularly as there are limited alternative roosting locations within the vicinity.

- 4.2.8 A roosting location has not been identified, and it is acknowledged that there is no absolute proof of hibernation as there is also a possibility of bats entering the building for foraging purposes during relatively mild weather conditions (i.e. feeding on moths and insects inside the building). However, the survey results show that there is bat activity during the time of the year when hibernation occurs, and given the evidence the likelihood is that common pipistrelle bat and brown long-eared bats hibernate inside the building.

5 RECOMMENDATIONS

- 5.1.1 The below recommendations cover the entire Hot Mill, not just the Motor Room.

5.2 Further Dusk Emergence Bat Surveys

- 5.2.1 Further surveys in the form of dusk emergence surveys. These surveys will need to be undertaken during the season when bats are most active, to watch and listen for bats emerging from the buildings at dusk. They should be undertaken between May and September (ideally between May and August) and be carried out using thermal video cameras (or other night vision aids).
- 5.2.2 The Bat Conservation Trust guidelines (Collins, 2023) states that moderate potential buildings, such as the Hot Mill, require at least two emergence surveys. The surveys should be spaced apart by at least 3 weeks.

5.3 Static Detectors and Night-time Bat Walkover

- 5.3.1 Due to the complex nature of the site and the scale of the buildings a bespoke survey design will be required in order to identify bat roosts and establish the extent of the bat activity on the site. This solution will involve a combination of dusk emergence surveys, deployment of static passive monitoring detectors and Night-time Bat Walkover (NBW) surveys.

5.4 DNA Testing of Bat Droppings

- 5.4.1 Samples should be taken of any bat droppings found (if any) and DNA testing of the bat droppings should be carried out as part of the survey works to identify the species present.

5.5 Licensing Requirements for Bats

- 5.5.1 As the Hot Mill has been found to be a bat roost, including likely hibernation roost for a small number of common pipistrelle and brown long eared bats, a European Protected Species (EPS) licence will be required from Natural Resources Wales (NRW) prior to works being undertaken on buildings with identified bat roosts. Further bat emergence surveys planned for summer 2025 may identify further roosts, if so these would also need to be considered within the licence application.
- 5.5.2 The current plan is to sell the building to another company who will demolish it. However, it is necessary to re-route the power first as it services other areas of the site. Removal of asbestos cladding in motor room will be needed before demolition can take place.
- 5.5.3 A licence will be required for any demolition works, including asbestos removal, once the above bat surveys are completed.

6 REFERENCES

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Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1*. Chartered Institute of Ecology and Environmental Management, Ampfield.

RSK Biocensus (2024) *Llanwern: Northern Site - Preliminary Bat Roost Assessment*. 2486598. RSK Biocensus, Cardiff.

FIGURE 1 - LOCATION PLAN



Legend:

Survey Area

00	12/05/2025	2486598	TG	SP	ED
Rev	Date	Description	Drn	Chk	App

Llanwern Hot Mill

RSK
biocensus
EXPERTS IN ECOLOGY

TITLE: Figure 1:
Site Location Plan

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Metres

SCALE: 1:16,000 @ A3

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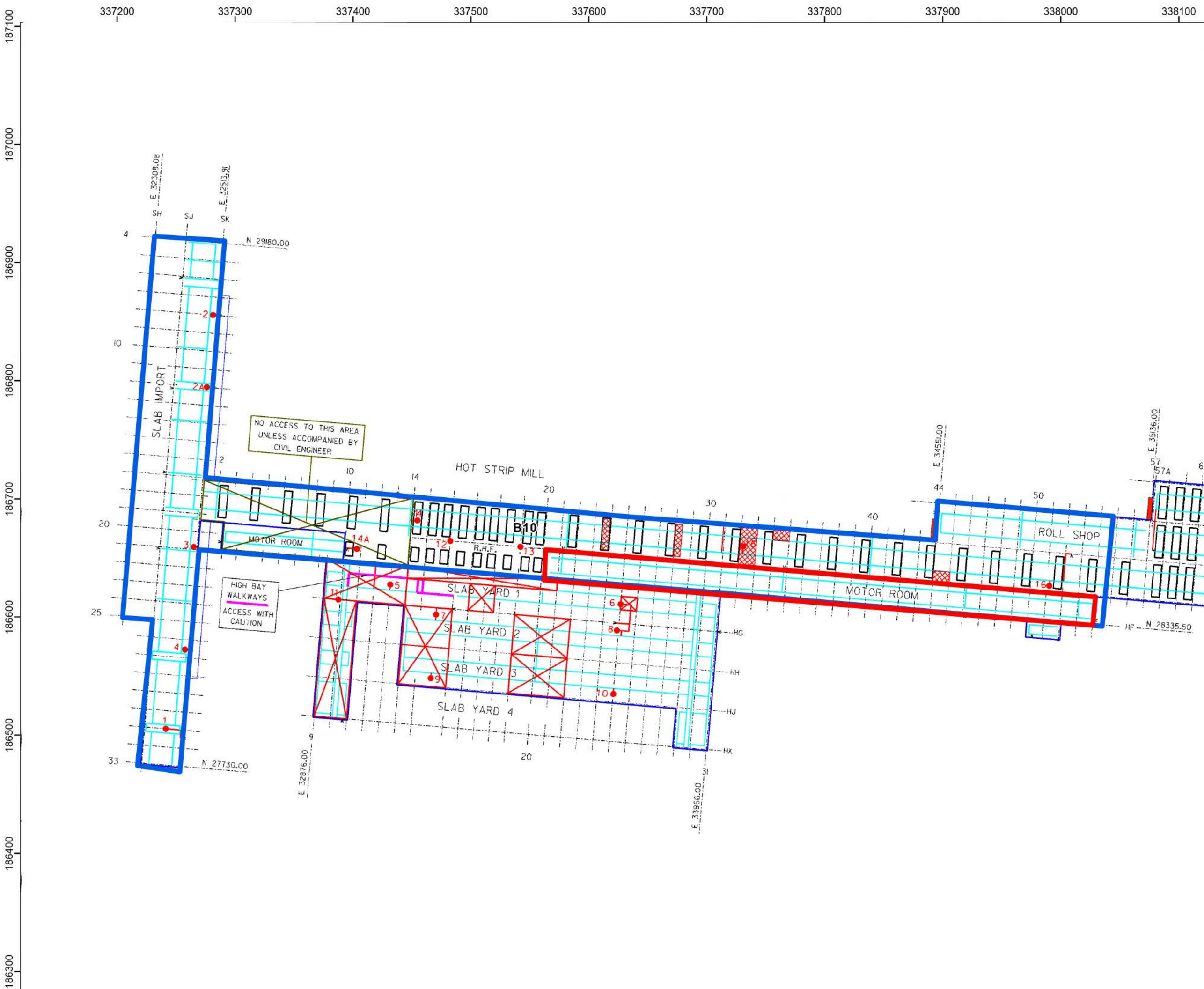
S

REV 00

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Hybrid Reference Layer: Esri Community Maps Contributors, Esri UK, Esri, TomTom, Garmin, GeoTechnologies, Inc, METI/NASA, USGS

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FIGURE 2 - BUILDING PLAN



- Legend:
- Building B10
 - Survey area (Motor room and basement)



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Rev	Date	Description	Drn	Chk	App

Llanwern Hot Mill



TITLE: Figure 2:
Building Plan

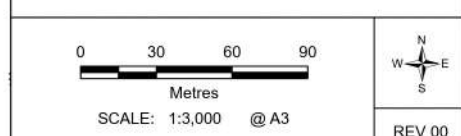


FIGURE 3 – LOCATION OF STATICS AND DATALOGGERS



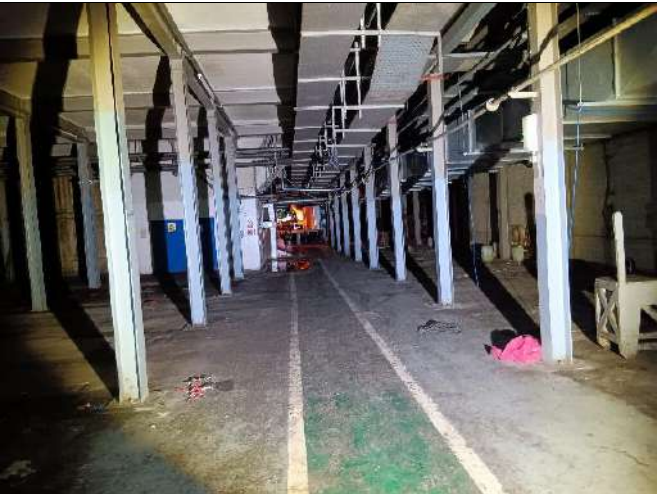
Legend:

- Survey Area
- Static Detector and Datalogger Locations
 - Static detector 1 and datalogger 2
 - Static detector 2
 - Static detector 3
 - Static detector 4 and datalogger 1
 - Dead bats found

00	12/05/2025	2486598	TG	SP	ED
Rev	Date	Description	Drn	Chk	App
Llanwern Hot Mill					
 EXPERTS IN ECOLOGY					
TITLE: Figure 3: Location of Statics and Dataloggers					
0 30 60 90 Metres SCALE: 1:2,600 @ A3			 REV 00		

APPENDIX 1 - PHOTOGRAPHS OF 'HOT MILL'

Photographs 12 December 2025	Description
	Very large metal warehouse. Building has a flat metal roof and louvred sides which form large gaps providing access to the interior along the northern and eastern elevations. Lots of potential access points; i.e. open doorways, gaps around pipework, louvred sides and missing panels of metal sheeting.

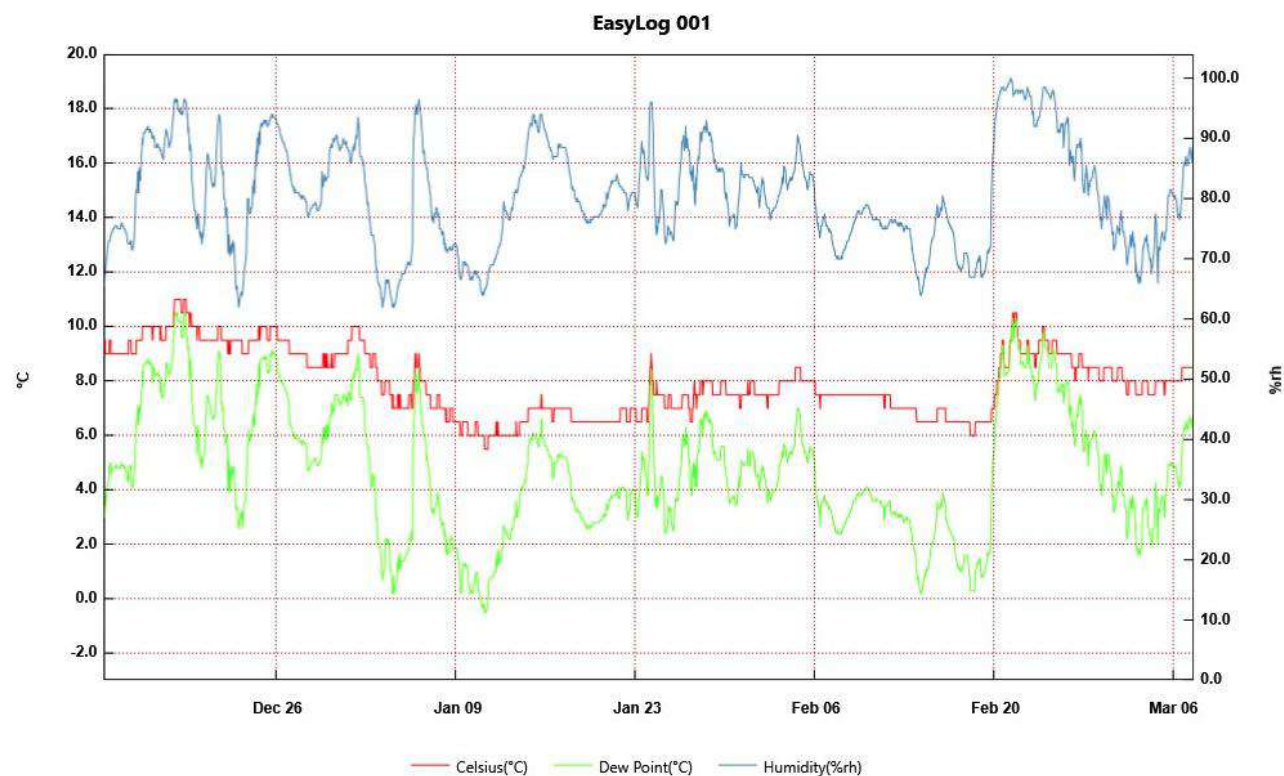
Photographs 12 December 2025	Description
	Ground level interior is open to the apex with metal rafters. Artificial lighting is always kept on. Multiple office buildings are contained within the warehouse interior space - These are of standard brick construction with flat bitumen roof and are in good condition and protected from the elements by the main warehouse.
	View of part of the very large basement area that spans under the entire building.

Photographs 12 December 2025	Description
	View of deployment of Static and Datalogger inside building on first floor.

Photographs 12 December 2025	Description
	View of deployment of Static in basement.

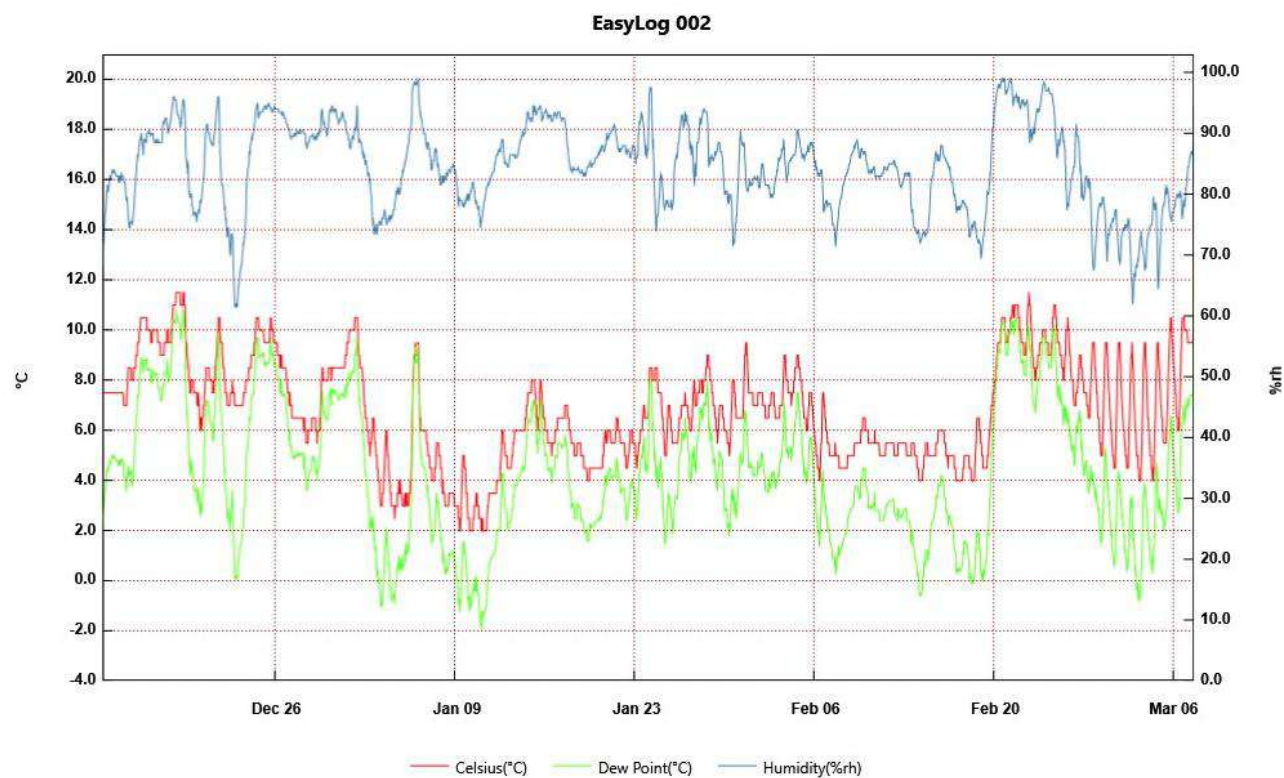
Photographs 12 December 2025	Description
	A dead Long-eared species identified on a wire mesh cage beside single storey internal building of first floor (at SE corner of engine room). A dead Pipistrelle species bat found in basement, near western end of building.
	Example of dead bird. More than ten dead birds, and one cat were also found.

APPENDIX 2 - DATALOGGER BASEMENT 12 DEC - 07 MAR



From: 12 December 2024 13:00:00 - To: 07 March 2025 15:00:00

APPENDIX 3 - DATALOGGER FIRST FLOOR 12 DEC - 07 MAR



From: 12 December 2024 13:30:19 - To: 07 March 2025 15:00:19



**INVESTORS
IN PEOPLE**

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