Bat Survey

Former Natwest Bank, St George's Road, Millom

18th July 2024

Report No. 0724/4

An update to the scoping report 0323/2, issued March 2023.

Report commissioned by;

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Executive Summary

The former Natwest Bank in Millom has been unoccupied for several years, and there is now a proposal to refurbish the building (including a complete re-roof) and build a single storey extension on the north elevation to house a café.

This report was commissioned to accompany a planning application, and involved an inspection of the property, desktop searches and 2 dusk roost surveys to assess whether bats are using, or have used it, for roosting purposes. An assessment is also made of the potential the buildings have to host bats or nesting birds, and whether this proposed development will have any negative impacts on individual bats, or the local bat population.

The building was inspected inside and outside for evidence of bat activity. There were minor restrictions but these are not considered significant enough to affect the findings of this survey.

The building has stone and brick walls, which are rendered in places. Roofs are complex, but all are pitched and covered by slate except for the flat roof extension for the bank's safe. The basement and ground floor were previously part of the bank and the upper two floors were residential, but only the first floor appears to have been used within recent years. The second floor ceilings are in poor condition, and the roof void, timbers and felt can be seen easily from these rooms.

Roosting potential was identified around the wooden window frame of the upper floor window (rear elevation) and under slates on the rear and south elevations where slates have slipped, or where gaps are present along the rakes, and under slates on the outbuildings.

The building is assessed as having moderate scope to host bats such as pipistrelles which are less sensitive to urban areas (with light and noise disturbance) – though it is most likely to only host individuals or small numbers of bats. Surrounding habitat is quite urban, though with some parkland to the rear, and is assessed as of low quality for bats due to lack of sheltered habitat features linking to better quality feeding areas.

No evidence of bats was seen in the survey, and there are no records from the property in the data search.

The two dusk surveys found that the area is well used by feeding pipistrelles (especially along the mature trees), but no bats emerged from the building. Only pipistrelles were observed around the property.

No roosts were found, and as such no EPS licence is needed for the project. Bats will often change roost sites throughout the season. As there is a reasonable level of bat activity in the area, and several potential roosts around the slate roof of the building, a precautionary approach to the re-roofing work is recommended - with a licenced ecologist on site for the initial roof strip.

There was evidence of previous nesting attempts by corvids (probably jackdaw) and pigeons, and several dead birds in the upper floor of the property. All native birds are protected whilst in the process of nesting, and so some avoidance measures have been suggested to reduce the risk of delays to the project due to nesting birds.

To encourage a net gain to biodiversity following the project it is recommended that 3 swift boxes and at least 3 other bird boxes and two bat boxes are erected on the building.

Contents

1 Introduction

1.1 Site description

The former Natwest Bank building is a large detached property in the town centre of Millom. It is located at SD 172 800, at approximately 10m AOD.

The property has been disused for several years, and is empty of furnishings. There are two separate parts to the building – the ground floor and basement with the bank infrastructure, and the first and second floors which were of domestic use. The building has a formal sandstone frontage and pitched slate roofs. There are two outbuildings on the southern elevation, and a small garden area to the north.

To the west of the property is an area of mature trees, a cemetery and community parks. Residential, community and commercial properties surround the property to the north and east. Millom is a small town and there are large ponds, intertidal habitats, agricultural land and nature reserves all within 2km of the building.

Figure 1 shows the location of the Natwest Bank building. Satellite imagery of the surrounding habitat and the area immediately surrounding the property is presented in figure 2. Photographs of the buildings are included in the appendices to this report.

1.2 Proposed works

The building requires significant internal refurbishments including a full re-roofing and replacement of doors and windows. There are also proposals to extend the ground floor to the north to create space for a café.

There are no set timescales for this project.

1.3 Aims of survey

This survey was commissioned to accompany a planning application to Cumberland Council, following an earlier scoping survey identifying potential for bats to use the building. This report is an update to the original scoping survey report issued in March 2023.

The aim of the survey is to assess whether bats use, or have used, the former Natwest Bank; and if so how it has been used. From this data an assessment will be made as to whether any particular roost and/or the surrounding bat population would be affected by the proposed development. If they are likely to be affected then appropriate mitigation proposals will be included in this report.

The inspection survey and ensuing report follow guidance and structure provided by Bat Conservation Trust (Bat Surveys Good Practice Guidelines, 3rd edition, 2016).

The property was also appraised for its potential to host breeding birds (and any evidence noted).

Figure 1. Location Map

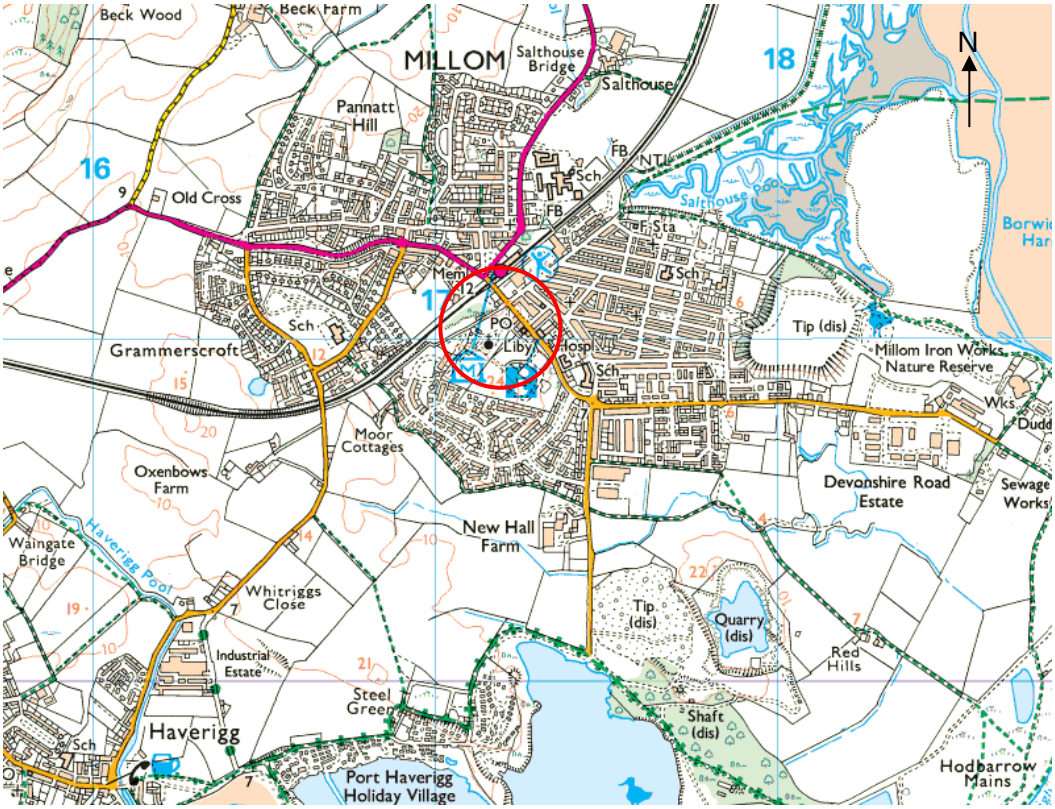

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Figure 2. Aerial photograph showing surrounding habitat

Red circle indicates location. (Imagery date 2018)

2 Methods

2.1 Desktop data search

A search of current literature (including the Bat Conservation Trust publication 'The Distribution Atlas of Bats in Britain and Ireland', Cumbria Biodiversity Data Centre's Mammal Atlas and 'Mammals of the British Isles') was done, looking for bat records in the 10km gird square in which the property is situated.

An internet search was also carried out, noting any land with statutory designations within 5km of the former Natwest Bank. Reasons for any relevant land designations were researched to check whether bats were important features. A search was also carried out for local EPS (European Protected Species) licenses for disturbance to bats (this will give further indication of species present in the area). Searches for statutory designations, and relevant citations were done on a DEFRA website www.magic.defra.gov.uk .

A detailed search was commissioned from Cumbria Biodiversity Data Centre, providing records of bats and their roosts within 2km of the property.

2.2 Surveyor information

The inspection was undertaken by Tamsin Douglas MCIEEM, experienced ecologist (holds Natural England Bat Class Licence – registration number 2015-10308-CLS-CLS).

The emergence surveys were led by Tamsin Douglas, with assistance from Terry Sheldrick, Natacha Reece and James Findlay (all experienced ecologists).

2.3 Field survey

2.3.1 Daytime inspection

A daylight inspection of the building to identify possible roosting and nesting locations and access routes to these locations was carried out on 10th March 2023 between 10.30 and 12.30 by Tamsin Douglas. An external re-inspection was carried out just prior to the first dusk survey on 10th June 2024 to look for any changes or new evidence.

The external and internal inspection was carried out, where necessary, using ladders, 10 x 42 binoculars, endoscope (Vscope VOxx-10WW), pole camera and a 1 million candlepower torch. The weather was cold with bright sun after overnight snow.

The building inspection involves a detailed internal and external daylight search for evidence of current or past use of the building by bats. Outside, particular attention is paid to the ground and ledges under any potential access points, weather boarding, hanging tiles, eaves, cracks and crevices in walls, and under tiles/slates. Internal inspections focus on areas around and below any potential roosting spots, ledges and lintels, behind crumbling render, and on and around roof timbers.

Evidence from a search which would indicate presence of bats includes-

- Roosting bats
- Corpses
- Droppings and urine staining on and around potential roosting areas (further evidence derived from amount and freshness of droppings)
- Droppings, staining and/or scratch marks at potential roost entrances

- Cleaner areas of woodwork, areas free of cobwebs suggesting bat activity such as crawling or flying
- Feeding detritus- such as moth wings
- Chattering or squeaking noise from roosting bats.

A general assessment is also made of the suitability of the surrounding habitat for bats, and connectivity to other areas of good quality foraging and commuting habitat.

Direct evidence of bats can be hard to detect and, as such, during the preliminary roost assessment the building is also appraised for its potential to host roosting bats. This potential is based on several factors:

- Presence of suitable internal or external features for roosting bats, and good access routes to these features
- Number of bats that these features could support
- Suitable conditions for roosting either in active season or for hibernation (humidity, temperature, exposure)
- Surrounding foraging and commuting habitat, connectivity to good habitat features
- Proximity to known roosts (especially for hibernation of species such as pipistrelles)

The need to undertake a roost emergence/ re-entry survey or hibernation survey (to provide further evidence as to whether bats use the building affected by these proposals) was determined by the results of this inspection.

2.3.2 Roost surveys

During the dusk or dawn roost survey, all suitable elevations of the property are observed for a standard period before and after sunrise or sunset. Surveys are carried out between May and September, when bats are most active. Surveyors watch all potential roosting locations to see if any bats emerge. Bat detectors (personal and static), digital recording devices and night-vision monoculars are used to aid detection and identification of any emerging bats.

A hibernation survey typically involves a detailed inspection of possible roosting sites using torch, mirror and endoscope, and can involve deploying static bat detectors. The survey is carried out in mid-winter, typically in January and February. The exact parameters of the survey depend on the nature of the site.

Two dusk emergence surveys were carried out on 10th June and 16th July 2024. Locations of surveyors are shown in figure 4 (in section 3.2.3 below).

Table 1. Emergence survey details.

	Survey Start	Survey End	Temperature	Weather
10th June 2024	21.30 (sunset 21.45)	23.15	10-9.5°C	Overcast 7/8 cloud cover, breeze F2-3. Dry
16th July 2024	21.20 (sunset 21.35)	23.05	16-15°C	Clear sky 1/8 cover, less at end. Wind F2-3 dropping (calm at end of survey)

Tamsin Douglas used an Echometer Touch Pro 2 with android tablet to record, Natasha Reece used an EMT Pro with iPhone, James Findley and Terry Sheldrick used an Echo Meter Touch with iPhone/ iPad to record. A Hik Micro Owl thermal imaging scope and Sony night vision camcorder with infra-red floodlights, and Anabat express static detector were also deployed. Any bat echolocation recorded was analysed using Kaleidoscope software. Video footage was analysed manually.

3 Results

3.1 Desktop search

3.1.1 Designated sites

There is a large amount of designated land within 5km of the former Natwest Bank, and also within 2km of the property. The vast majority of this designated land is coastal/ inter-tidal.

A total of two SSSIs, one NNR (National Nature Reserve), one LNR (Local Nature Reserve), one SPA (Special Protection Area) and one SAC (Special Areas of Conservation) are found within 5km of the property. Although these may support bat populations, none of them detail bats in the supporting citations.

3.1.2 Protected species

Eight species of bat are currently known to breed in Cumbria, with a further two species that have been recorded within the county. All species of bat in the UK are fully protected under UK and European law.

Table 2. Status of bats in Cumbria

Species	Status in Cumbria
Whiskered bat *Myotis mystacinus*	Widespread, but uncommon. Maternity and hibernation roosts recorded.
Brandt's bat *M.brandtii*	Widespread, but uncommon. Maternity and hibernation roosts recorded.
Natterer's bat *M.nattereri*	Widespread. Maternity and hibernation roosts recorded.
Daubenton's bat *M.daubentonii*	Widespread. Strongly associated with still or slow moving water. Maternity and hibernation roosts recorded.
Noctule *Nyctalus noctula*	Widespread, but uncommon. Rarely associated with buildings. Breeding roosts recorded.
Leisler's bat *N.leisleri*	Rare. Only a confirmed bat detector record in Cumbria.
Common pipistrelle *Pipistrellus pipistrellus*	Widespread. Roosts often associated with modern buildings, forages in a variety of habitats. Maternity and hibernation roosts recorded.
Soprano pipistrelle *P.pygmaeus*	Widespread. Only recently separated as a species from common pipistrelle, often associated with waterbodies, though forages in wide range of habitats. Maternity and hibernation roosts recorded.
Nathusius' pipistrelle *P.nathusii*	Rare. Recently added to Cumbria's list of bats. No confirmed breeding roosts recorded yet.
Brown long-eared bat *Plecotus auritus*	Widespread, but uncommon. Often associated with older buildings with good roof space. Maternity and hibernation roosts recorded.

The literature search provided records of summer roosts for 4 species of bats within the hectad SD18 (10km square) in which the former Natwest Bank is located. These are Whiskered/ Brandt's bat (very similar species difficult to separate), natterer's bat, pipistrelle species and brown long eared bat. The CBDC Mammal Atlas had recent (post-2000) confirmed records in SD18 for the species above, as well as; Daubenton's bat and noctule.

The internet search looking at nearby granted EPS (European Protected Species) licenses for bats produced no records within 5km. This is likely to be in part due to the low population density in this area (and large amount of coastal habitat) rather than a paucity of bats.

The detailed site search carried out by Cumbria Biodiversity Data Centre gave 12 records of bats within 2km of the property. The only named species on the records was common pipistrelle (but there were some 'bat' records of undefined species). Records dated from 1998 to 2014, and included 4 records of roost sites. No records came from the property or its immediate surroundings (the closest valid record was 500m away).

Bats are generally an under-recorded group, and as such biological records such as those above can only be used as a guide to illustrate potential distributions in the area, and are not definitive.

3.2 Field survey

3.2.1 Habitat assessment

The property is in an urban setting, with residential areas (especially terraced houses with yards), commercial buildings and community areas nearby. Immediately west of the building are some mature deciduous trees and mown grassland leading to the church and cemetery, and some playing fields.

Beyond the urban area is agricultural land – primarily pasture with some cropland. There are small pockets of woodland and natural grasslands around Millom Ironworks LNR to the east, and Hodbarrow RSPB reserve to the south. Hodbarrow reserve also has several ponds and two large saline lagoons. Coastal habitats (saltmarsh and estuarine sands) have a strong influence within 2km of the property.

Bats can fly several kilometres to their feeding grounds, often following linear features such as hedgerows. Sheltered areas, particularly around water, tend to have greater amounts of invertebrate prey, and as such are sought out by foraging bats.

The habitat immediately to the west of the property offers some foraging opportunities for bats, but beyond this habitat is quite fragmented with few linking hedgerows, woodlands or watercourses leading to better feeding areas (such as at Hodbarrow). Overall the habitat quality is low for foraging and commuting bats due to this poor connectivity to good habitats, and the more disturbed urban setting (especially by artificial light).

3.2.2 Roosting assessment

Table 3: Factors affecting the probability of a building being used by bats in summer

Factors increasing probability	Disused or little used; largely undisturbed Large roof void with unobstructed flying spaces Large dimension roof timbers with cracks, joints and holes Uneven roof covering with gaps, though not too draughty Entrances that bats can fly in through Hanging tiles or wood cladding, especially on south-facing walls Rural setting Close to woodland and/or water Pre-20th century or early 20th century construction Roof warmed by the sun
Factors decreasing probability	Urban setting or highly urbanised area with few feeding places Small or cluttered roof void (esp. for Plecotus) Heavily disturbed

	Modern construction with few gaps around soffits or eaves (but be aware these may be used by pipistrelles in particular) Prefabricated with steel and sheet materials Active industrial premises Roof shaded from the sun

(Taken from A. Mitchell-Jones, 2004)

Building construction

The building is from the late Victorian era, and is detached with a boundary stone wall and small area of grassland and trees (maturing ash and sycamore) to the north. There are four floors, including a basement.

The exterior of the building comprises sandstone walls, with some areas of brick walls to the rear (some of which are rendered). Above these walls are pitched slate roofs of varying orientation. On the front elevation are decorative gables and a long balcony on the first floor.

The external walls offer very limited roosting opportunities for bats, as the walls are well sealed at the eaves and there are few significant cracks or holes in the stonework or around the timber window frames. A notable exception to this is a significant gap surrounding the first floor window on the rear (west) elevation. The wooden fascia and soffits are in poor repair, but there are no gaps at the wall tops.

The roof slates are generally all in place and tightly fitted together (especially on the steeper pitches of the front elevations). Some missing slates were noted on the side (north) elevation in the structural report – but these could not be seen due to the covering of snow on the inspection date. There were gaps noted along the rakes on the rear and south elevations where the barge boards had rotted away.

The two outbuildings had some scope to host bats. The brick lean-to at the south-west corner of the landholding had gaps around roof slates and coping stones on the high boundary wall (forming the ridge of the building). The sandstone outbuilding (male toilets) also has some slipped slates around the roof.

Internally the first floor, ground floor and basement had no scope or opportunities for roosting bats. The upper floor has been unused for a considerable period of time, and there was loft insulation covering all of the floors. Many of the internal ceilings had partially collapsed around the dormers and eaves, and most rooms offered clear views into the roof void.

Under the roof slates the roofing felt was in good condition in most parts of the void, with few tears or sags. Daylight could be seen in places where slates were missing, and at the eaves – but the majority of the voids were fairly dark. The roof voids were of varying height, depending how far into them the second floor rooms extended. All had extensive cobwebs around roof timbers without any insulation around the timbers or floors, and the air was very dusty.

Suitability for bats

The building (including outbuildings) offers some scope for roosting bats – mostly around the roof areas (especially where slates are slipped/ missing and along the rakes). There is also some potential for bats to exploit the gaps around the upper floor window on the western elevation. None of these are high quality roosting areas, but they could be used by small to moderate numbers of bats at any time of the year – but more particularly in the active season (April- October).

Evidence of bats

No evidence of bats or bat activity was found during the inspection. No droppings were seen in or around the roof voids or upper floor bedrooms, and no bats seen in the voids or in suitable crevices within reach of inspection.

The floors of the roof voids were not safe to access (some were partially collapsed), and so these areas were assessed using a bright inspection torch and binoculars from the open hatches and from the gaps in the ceilings.

No changes to the site, or new evidence of bat activity was identified following the re-inspection in June 2024.

3.2.3 Summary of suitability of site for bats

Based on the evidence above, and using published guidance (summarised below) the former Natwest Bank in Millom is assessed as having low to moderate potential for roosting bats, and surrounding habitat has low suitability for commuting and foraging bats.

The property was assessed as having low potential to host hibernating bats, based on type and exposure of roosting features present, connectivity of habitat and proximity of known roosts.

As a result of this assessment at 2 summer roost surveys were carried out to assess whether bats use (or show any interest in) the building.

Table 4: Summary of site suitability for bats.

Suitability	Roosting habitat-summer	Commuting/ foraging habitat
Negligible	No features found that are likely to be used	No features found that are likely to be used
Low	A structure with one or more potential roost sites, suitable for opportunistic use. Unlikely to be used by large numbers of bats or on a regular basis.	Habitat that could be used by small numbers of commuting or foraging bats, but isolated and not well connected to other suitable features.
Moderate	Structure with one or more potential roost sites, that could be used by bats – but unlikely to support roost of high conservation status.	Continuous habitat connected to wider landscape that could be used by bats for foraging and/ or commuting.
High	Structure with one or more roost sites that are obviously suitable for larger numbers of bats on a more regular basis or for a longer period of time.	Continuous high-quality habitat that is well connected to the wider landscape and likely to be used regularly by foraging and/or commuting bats. Site near to and well connected to known bat roosts.

Table based on Table 4.1 of 'Bat Surveys for Professional Ecologists', BCT 2016

3.3 Roost surveys

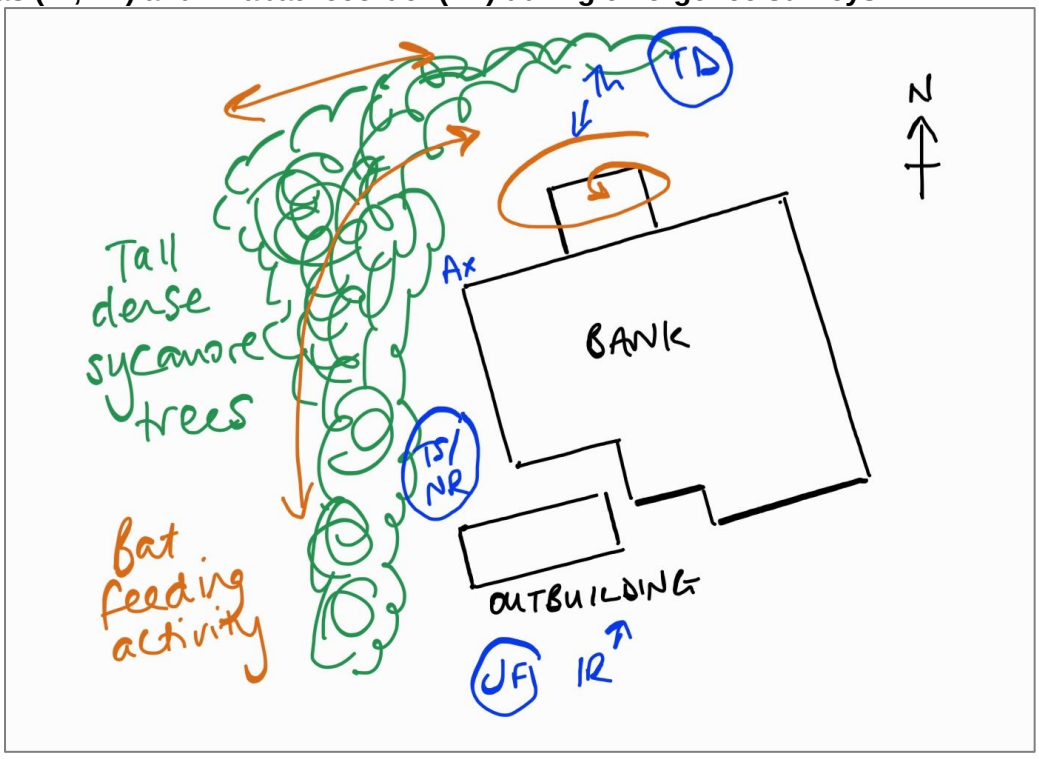
During the first dusk emergence survey no bats were seen emerging from the building, but there was a lot of foraging activity around the trees at the rear.

The first bat seen heard was a soprano pipistrelle at 21.40 (5 minutes before sunset) foraging behind the trees at the rear of the building. Frequent foraging by soprano pipistrelles was heard throughout the first hour of the survey. Only 1 bat was seen at any one time but activity was focussed along the treeline and over the small garden at the side and rear of the building. A common pipistrelle was also heard feeding around the trees at 22.40, and sporadically until the end of the survey. No other species of bats were seen or heard.

During the second emergence survey, no bats were seen emerging from the building, but foraging activity was frequent throughout the survey.

The first bat heard was a soprano pipistrelle at 21.38 (3 minutes after sunset) behind the trees at the rear of the building. As for the previous survey from this point onwards there was regular feeding activity seen and heard along the mature trees and over the garden by soprano pipistrelles. A total of 3 bats were seen together at one point. A common pipistrelle was heard at 22.10, and sporadically until the end of the survey. No other species of bats were seen or heard.

Figure 3. Sketch showing bat activity and position of surveyors (TD, JF and NR/TS), cameras (IR, Th) and Anabat recorder (Ax) during emergence surveys.



N.B The east side of the building was scoped out of the survey as there were no potential roosts identified in this area, and it was very well lit by streetlights. No activity was seen along the front of the building by TD in either survey.

3.4 Other species

There was significant evidence that the upper floor and roof area have been used by birds (pigeons and corvids) both as a roost site and to nest. There were piles of nesting material as well as broken eggs and several dead birds (some recent, some only skeletons).

No new evidence of nesting birds was noted during the dusk surveys, but there was a significant level of corvid activity around the building and adjacent mature trees. Wood pigeon and herring gull were also observed at the property, and were vocal during the surveys.

4 Assessment

4.1 Constraints on survey information

The weather for both dusk surveys was suitable for observing emerging bats and bat activity.

The height of the building and close presence of tall trees obscured views of several parts of the roof, but the placement of surveyors, detectors and cameras all aided the detection of bats on the property and gave a good indication of whether they had emerged from the building or flown into the area to feed.

Noise from the road and the large corvid roost did not impact on the survey findings, but this disturbance (and the bright streetlighting) made the site less likely to support a significant roost of bats, or sensitive species (such as Myotis and brown long-eared bats).

During the 2023 inspection, close access was possible to the all the lower external walls and eaves. Torch and binoculars were used to assess the roof, eaves and upper walls. The roof area was not considered safe to enter – many of the ceilings of the upper floor had partially collapsed. These areas were assessed from the loft hatches using torch and binoculars, and through gaps in the ceilings.

These constraints are not considered to affect the findings of this survey.

4.2 Constraints on equipment used

The conditions during the surveys were suitable for survey purposes and for the equipment used.

4.3 Potential impacts of the development

4.3.1 Designated sites

The proposed development will not have any negative impacts on nearby designated sites.

4.3.2 Roosts

No roosts were identified on the building during the surveys.

There is a significant level of pipistrelle activity around the trees, however, and several potential roost sites around the roof area - so a precautionary approach to the works is recommended.

4.3.3 Commuting and foraging habitat

The area surrounding the former Natwest Bank is a moderate foraging location for bats with poor quality connections to adjacent areas of higher quality habitat. The proposed development is highly unlikely to have a detrimental impact on the quality of the foraging habitat for bats.

4.4 Legislation and Policy guidance

Bats have declined in numbers dramatically across the UK and Western Europe in recent decades. Key factors linked to their decline are loss of roosting places due to building works and woodland destruction. Other factors implicated in their decline are changes in the countryside resulting in habitat loss and greater fragmentation of foraging habitats, and severing of commuting flightlines due to transport developments and hedgerow destruction.

As a consequence of these significant declines, bats and their roosts are protected under British and European law.

All bats are listed under Annexe IV of the EU Habitats Directive, and some under Annexe II. This law is transposed into English law into the Conservation of Habitats and Species Regulations (2010).

Bats are also protected in the UK under the Wildlife and Countryside Act 1981 (as amended).

As a result of the above legislation it is an offence to;

- Deliberately capture, injure or kill a bat,
- Disturb a bat such that their survival, reproductive capacity, or the well being of the local population is affected
- Intentionally or recklessly disturb a roosting bat, or block access to its roost.

If the proposed works were assessed as likely to commit an offence under the above legislation, then a European Protected Species (EPS) mitigation licence would need to be sought.

Based on the evidence gathered from the inspection and two emergence surveys, and the experience of the surveyor, it is unlikely that an offence will to be committed by the proposed development under the above legislation, and as such no EPS licence will need to be obtained.

Given the condition of the roof, with many potential roosts, and levels of bat activity around the building, it is recommended that there is a precautionary approach to the works with reasonable avoidance measures followed (see section 5 below).

5 Recommendations and mitigation

5.1 Further survey

No further survey work is required for these proposals.

The findings of this inspection report are valid provided that work commences within 12 months of the date of this report.

5.2 Avoidance and mitigation measures

5.2.1 Proposals for roost sites and potential roost sites

As there is a good level of pipistrelle activity in the vicinity of the building, several potential roost sites in the roof of the building, and bats can often change roost site or exploit new ones (even on a temporary basis) – a precautionary approach is recommended for the re-roofing work.

A licenced ecologist should be on site when the roof strip commences, and should remain on site until they consider that the risk of encountering an itinerant bat is insignificant. The ecologist will advise the roofing contractors about the potential risk of bats being present, and request slates are checked before being slid down the roof and stacked (bats tend to cling to the underside of slates and as such are vulnerable to being crushed when slates are stacked).

If any bats are encountered the ecologist can advise how to proceed with the works appropriately (in terms of UK law and bat welfare).

5.2.2 Proposals for foraging and commuting habitat

No mitigation for foraging and commuting habitat is required for this development.

5.3 Mitigation licenses

As stated in section 4.4, based on the evidence gained from the surveys, it is considered that the proposed building works at the former Natwest Bank in Millom, as described in section 1.2, do not require an EPS licence.

5.4 Other species

The upper floor and roof area have been used in the past by corvids and pigeons to roost and nest. There is a small rookery in the nearby deciduous trees to the west, and birds may still try to access the roof area of the bank to nest. Rooks, jackdaw and pigeons are all widespread species, and are not of conservation concern, however all native UK species are protected whilst nesting under the Wildlife and Countryside Act 1981 (as amended). As such it is recommended that wherever possible birds are prevented from accessing the interior of the building to nest, and if the renovations are to start within the nesting season (end of March to mid-August) a nesting bird check should first be carried out.

5.5 Enhancement measures

Following local planning guidance, measures to encourage a net gain of biodiversity should be included for all new developments.

As bats are quite active around the building, two bat boxes should be installed on the rear (west) and/ or side (south) elevations. Boxes should be installed high on the walls when the scaffold is in place. They are self-cleaning and self-contained so will require no further management once fixed in place on the external walls. The best boxes to use are long lasting woodcrete versions such as Schweggler 2FE bat shelter (available from various suppliers).

Given the height of the property, swift nest boxes would be appropriate on the north elevation (up near the eaves – they require a clear flight route into the box which should be at least 5m above the ground). Swifts nest in loose colonies, so three boxes should be erected to encourage them.

Three other bird nesting boxes for smaller species (such as a sparrow terrace, robin box or tit box) should be installed lower down on north or east elevations between 2 and 4m high on the external walls. All boxes should be installed in areas where they will not be exposed to predators such as cats.

Bird boxes are available from various suppliers, but specialist websites such as RSPB, the Nestbox Company, Wildcare and CJ Wildlife are likely to have better quality and more appropriate options than more generic websites.

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Bat Conservation Trust www.bats.org.uk

JNCC, Bat habitat management pages http://jncc.defra.gov.uk/page-2465

Details on the work done regarding issues with bats and non-bitumen roofing membranes www.**bats**andbrms.co.uk

Details on status of bats in Cumbria http://www.cumberlandbatgroup.org.uk

Cumbria Biodiversity Data Centre, Cumbria Mammal Atlas http://www.cbdc.org.uk/wildlife-in-cumbria/cumbria-mammal-atlas/

Appendices

i) Photographs (images taken 10th March 2023 unless stated otherwise)

Image 1. Front (East) elevation of property.

Note the steep pitch of the upper roof on this elevation.

Image 2. Side (north) elevation of the property, showing extension on ground floor to house the safe.

Image 3. Rear (west) elevation. No render over the brickwork.

Image 4.
Side (south) elevation, showing the decorative gables, and the rendered walls towards the rear of the building.

Image 5.
Two outbuildings on the south elevation. Detached lean-to against the boundary wall in foreground, and stone building to rear of image (male toilets).

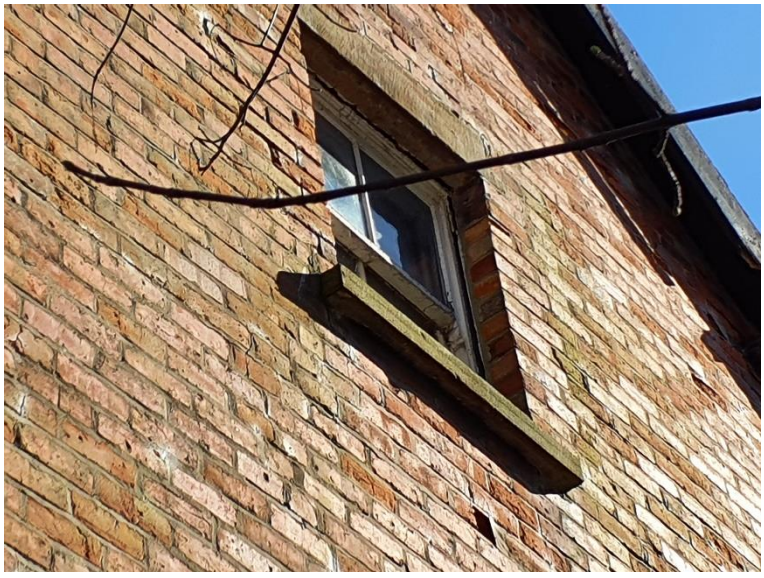

Image 6.
Window on rear elevation where brickwork has bowed out creating gaps around the wooden frame suitable for roosting bats.

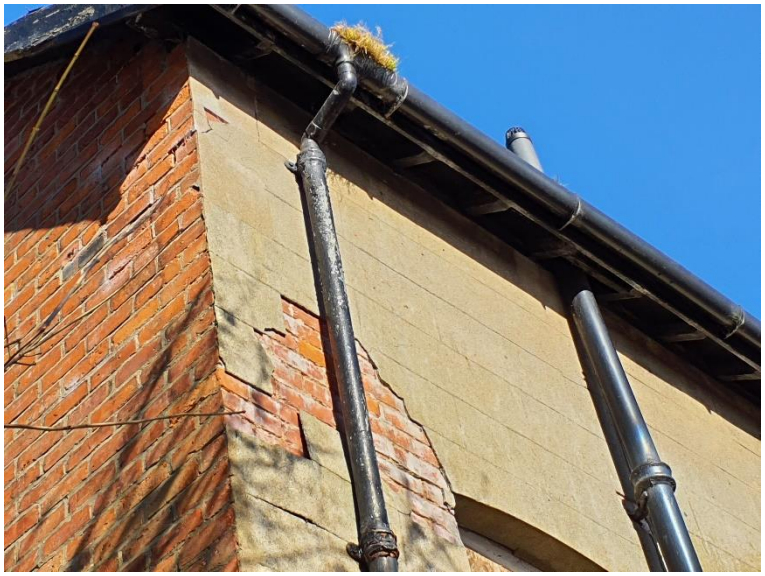

Image 7.
South-west corner of the building where the render has crumbled to reveal brickwork. No gaps at wall tops seen.

Image 8.
West elevation showing gaps along the rakes where the boards have rotted – potential for use by bats.

Image 9.
Second floor of property, showing poor condition of rooms on this floor, and clearly visible roof timbers.

Image 10.
Second floor room, showing crumbled mortar around eaves, and the roof insulation covering all the floorboards.

Image 11.
Interior of roof void at the rear of the building (looking west).
Empty void – no insulation or stored materials.

Image 12.
Second floor room at the front of the property with tear in roofing felt. Felt in quite good condition throughout the rest of the roof area.

Image 13.
Roof void seen through fallen ceiling, showing missing slate (clear daylight).

Image 14.
Image taken 16/7/24.
Showing the density of the mature trees alongside the building – which were well used by feeding bats.

Image 15.
Image taken 16/7/24.
Showing the northern elevation of the building- much of the roof is still in reasonable condition with just a few notable gaps.

Image 16. Screenshot from infra-red camera 30 minutes after sunset on survey 1 (pipistrelles typically emerge from around sunset to 30mins after sunset).

Image 17. View of the northern dormer with significant gaps around as seen through the thermal imager on both of the surveys.