

Appendix E.A02
Bat Building Survey Results

BAT BUILDING SURVEY

SURVEY RESULTS

Description of Buildings and Bat Evidence/Potential

Hangers Cluster 36 – 39 (inspected 14/11/06)

This sequence of buildings consists of large decommissioned domed aircraft hangers of thick preformed concrete construction with internal metal reinforcement. These buildings are now used for private storage or as workshops e.g. Hanger 38 is now used as a customised car workshop. Where the main hanger doors are shut, the buildings have few obvious potential bat access points, but these few are common to all the hangers in this group; emerging pipework through the side of the buildings, holes in some of the external ventilation grilles at the back corners of the building about 1m above ground level and a number of large air ducts/extractors set in the top of the building. There are also potential bat access points behind the metal trim that cover gaps in the sliding hanger doors when they are shut. The hangers are 20m+ high and most of the upper reaches were obscured from close inspection. Where the hanger doors were open (Hanger 38), it was possible to inspect the interior. The metal reinforcement lining the hangers is deceptively smooth and would appear to offer little purchase for bats, except perhaps where the external ducts emerge through the ceiling and above the doors.

Bat Evidence/Potential

No evidence of bats was found. The value of these structures to bats is difficult to determine; they could offer constant, dark, cool and humid environmental conditions that may have value as occasional roosts for individual bats or possibly as hibernation roosts, although few suitable roosting opportunities were observed. The exposed, treeless setting of most of this cluster would also seem to lower their potential as bat roosts. However, evidence from cluster 3052 – 3055 would suggest that bats could be using open hangers at least occasionally as foraging beats and possibly as night roosts.

A number of small, concrete fuel storage facilities and electricity sub-stations in the immediate vicinity of the hangers were briefly examined. These were largely exposed to the elements and had few features with obvious value to bats. No evidence of bats was found. These have very low or no value for bats.

Hangers Cluster 3052-3055 (inspected 29/11/06)

These occur at the north-western end of the site and follow the same basic design as the first group, sharing most of the same external potential access features. The setting is somewhat different as all four hangers are in close proximity to a linear vegetation corridor of semi-mature trees, such as Cherry *Prunus* sp. and conifer species, which runs behind the hangers around the site perimeter. Otherwise, the area is flat, open and exposed. It was possible to inspect the interiors of this cluster. Bat droppings were found in Nos 3053 and 3054.

Hanger 3052

This is currently used for storage of farm equipment and hay bales, with further vehicles and containers stored next to the hanger. One hanger door is left open, and dropping evidence suggests regular use by rats, mice, fox, rabbits and birds. An owl pellet (probably Barn owl *Tyto alba*) was found near the main doors but no nest site was noted. Large parts of the interior fabric were difficult to inspect due to stored materials, therefore evidence of bats could have been missed.

Bat Evidence/Potential

No evidence of bats was found. The open doors would allow easy access for bats and the stored materials make this a surrogate barn. As such, it may attract insects and therefore have some value as a sheltered feeding station for bats. Based on bat evidence in hanger 3053, which is also used for farm storage, this seems likely.

Hanger 3053

The east door appears to be left permanently open, judging by vegetation in the door gutter. There is also evidence of use by rodents etc. amongst the stored farm equipment and hay bales.

Bat Evidence/Potential

A group of old pipistrelle type droppings (approx. 8) were found amongst other detritus in a gutter just inside the closed west door. The provenance of the droppings is difficult to determine, as a large amount of dust and insect fragments accumulate in these gutters.

Hanger 3054

The doors in this hanger are generally kept closed but were opened for our inspection and to deliver pallets of stored materials. This premises has recently been taken over for use as a warehouse and the main interior appears to have been cleaned. At the time of inspection, the building was largely empty.

Bat Evidence/Potential

Six individual old bat droppings were found in the hanger; three in the gutter attached to the west door, and a further three amongst pipes and ducting on the west wall. Most of these resembled pipistrelle type droppings, with one unidentified dropping on the west wall.

Hanger 3055

This hanger is used for police training in firearms and crowd control. Equipment is left stored in the building, making it difficult to inspect some areas. Netting across the open hanger doors has enough gaps to allow bat access.

Bat Evidence/Potential

No evidence of bats was found. This is at least intermittently a highly disturbed site, and, at best, is only likely to be suitable as a hunting ground or occasional night roost when doors are open.

Outbuildings 1807, 3101, and 1804

Two bunkers/pillboxes and an electricity substation occur in the vicinity of the hangers. There was evidence of a possible badger sett inside No 1807, with a further hole next to the bunker.

Bat Evidence/Potential

No evidence of bats was found and the bunkers have low value for bats. The sub station has no value for bats.

EVALUATION AND RECOMMENDATIONS

Bat Evidence

A small number of bat droppings were found in two of the hangers at the north western end of the site but it is difficult to determine whether the hangers are actually used as roosts. There is a lack of obvious roosting positions within the metal interior but these could occur above the doors. Hanger 3053 appears to be left permanently open. It is possible that the hanger is used as a foraging site and that droppings have accumulated from flying rather than roosting bats. Droppings found in the closed hanger certainly pre-date the hanger's current usage; and may date from a time when doors were also kept open allowing bats to forage.

Recommendations

Emergence surveys during the peak bat activity period May – August should be undertaken to try and establish how bats are using these sites. It is likely that a number of evenings would be required to more fully assess the roost status of these buildings.

Description of Buildings: Building 1443(inspected 14/11/06)

This large, irregular shaped metal and concrete structure is currently used as a factory. It was not possible to inspect the interior of the building. No bats or signs of bats were seen. Few points of potential bats access were observed nor were obvious potential roost sites apparent. There were some dark recesses/ possible voids under the overhanging extension that projects from the building on the south side, but these could not be closely examined

Bat Evidence/Potential

No evidence of bats was found and, on the basis of limited inspection, the building has low potential.

Boiler House (next to Building 368) (inspected 14/11/06)

A small brick building used for storage/as a workshop. A few potential access holes/roost sites were noted; holes around pipe work and some lifted felt around the chimney. The double thickness wall could contain a cavity. It was not possible to inspect the interior of the building.

Bat Evidence/Potential

No evidence of bats was found and, on the basis of limited inspection, the building has low potential.

Building 352 (inspected 14/11/06)

A large brick single story building with a flat roof in a relatively exposed, treeless setting. No internal inspection was undertaken. Few signs of bat access/roost potential: except some lifted felt on the west doorway.

Bat Evidence/Potential

No evidence of bats was found and, on the basis of limited inspection, the building has low potential.

Description of Buildings: Police Training Centre (inspected 14/11/06)

This former housing estate on the south of the proposed development site is now unoccupied and currently used by the police for training purposes, including firearms training. There is no public access therefore human disturbance is likely to be occasional but significant.

Building 441

The brick single storey structure is clad with asbestos on its upper half. Gaps occur at the top of the sheets and there are grilles and a hole on the east side through metal doors.

Bat Evidence/Potential

No evidence of bats was found and, on the basis of limited inspection, the building has low potential.

Buildings 445 and 446

These two blocks of three storey flats have a brick base overlaid with "pebble dash" panels and plywood or ceramic boards beneath the windows. There are stairwells at either end. It was unclear from the inspection whether the buildings have cavity walls. Potential bat access points include ventilation and pipework in the ground floor walls and under hanging 'tiles' or panels at each end of the shallow pitched roofs. The roofs themselves appear well sealed although visibility was limited. Some of the windows in No 446 are open.

Bat Evidence/Potential

No evidence of bats was found and, on the basis of limited inspection, the buildings have low potential.

However, these are large buildings and internal inspection would be recommended.

Buildings 498 and 500

Both buildings are brick built slate roofed two storey flats with an H block configuration. They appear to be in generally good condition, especially No 500, but many of the windows in No 498 are open. Poor light made inspection difficult.

Bat Evidence/Potential

No evidence of bats was found and, on the basis of limited inspection, the buildings have low to medium potential. However, these are large buildings and internal inspection would be recommended.

Brick shelters

There are four brick shelters/ gazebos to the north and south of the H blocks. These have pitched roofs with potential bat access beneath the ridge and underneath the roof. There is a clear gap between tiles and the boards underneath. The tiles appear to be lined with bitumen felt. These could offer usable voids for bats.

Bat Evidence/Potential

No evidence of bats was found, but the accessible roofs could provide usable voids for bats.

Building 502

This single storey rendered brick building has a well sealed roof and sealed plastic soffits. It is used by the police for CS gas training.

Bat Evidence/Potential

No evidence of bats was found. Given its use and well sealed exterior, this building is assumed to have little or no value for bats.

Heyford Park Housing Estate (inspected 28/11/06 - 30/11/06)

Methodology

External inspection of buildings at Heyford Park housing Estate was undertaken by David Andrews and Catherine Greenhough of EPR in November 2006. Inaccessible structures were viewed with binoculars where sightlines permitted.

External walls, roofs and floors were searched for signs that bats may be using, or have recently used, the buildings for roosting. Such signs may include:

Staining or scratch marks;

Droppings around holes in walls, soffits, bargeboards and windows;

Droppings on flat surfaces in and around the buildings (such as drain pipes, window ledges), where these were viewable from the road.

Signs of bats can be washed off external surfaces by wind or rain and so it cannot be assumed that bats do not roost in a building simply because no signs are found.

Most of the occupied buildings were examined from the roadside only, as access to individual properties was not practical to arrange when surveying such a large area. As a result, it was not usually possible to inspect all elevations of a given building. Some of the houses have front gardens, which further prevented close inspection.

Overview of Estate

The estate is located in the southern part of the proposed development site (see Map). It largely consists of rented residential housing, with a number of warehouses, water treatment works and ancillary facilities at the northern end. These date from the 1920s through to the 1970s/1980s. The main road through Heyford Park marks the northern boundary. To the east is further housing, consisting mostly of larger blocks of flats; these are now unoccupied and used as a police training ground. To the south and west, the estate backs on to arable farmland consisting of large flat open fields, with little woodland or hedgerow cover. As a result, the estate is rather exposed to winds, with little substantial vegetation to provide shelter other than scattered ornamental trees and a small number of conifers. Unless otherwise stated, all residential properties on the estate have well sealed UPVC windows.

Bat Evidence

No evidence of bats was found during external inspection of any part of the Heyford Park Housing Estate.

RESIDENTIAL

Description of Buildings: Bungalows

Most of the housing stock consists of a large number of semi-detached 1950s bungalows. These cover two thirds of the site (see Map) in the south west of the estate. Some of them are currently unoccupied. It was rarely possible to inspect the rear of the properties, due to the site layout.

Those bungalows situated along Harris Rd and Tait Drive (south and west) back directly onto arable land. A wet ditch may run along the southern boundary, lined with occasional small trees and light scrub, but this could not be viewed clearly from the road. There is an open concrete water tank at the eastern end of Harris Road, currently holding water and surrounded by scrub.

All bungalows, from Harris Road in the south to Whitley Drive in the north, conform to the same basic design (see Photo). Each bungalow is a single skin structure with a pitched roof, cast in situ on a low brick base. The main frame is clad with polystyrene insulation and covered with a "pebbledash" material. There are thin board panels beneath the main windows. Soffits are made of board or plastic, with few holes that would allow access to bats. Two types of clay roof tile; of rounded and square design, have been used in roughly equal measure

across the estate - the square tiles generally providing a tighter seal. Gaps beneath the bottom rank of rounded tiles are plugged with concrete. Ventilation grilles at the end of each building presumably connect to the roof space, but no gaps or broken grilles were noted. According to a resident, the bungalows have usable roof voids, roughly 1.5m at the apex, with fibreglass insulation and bitumen felt. These were not inspected.

The condition of the buildings varies somewhat, with buildings in the north generally in slightly better repair. A number of potential bat access points were observed, most of which occurred on some rather than all properties. These include lifted or missing tiles, gaps in the ridge and holes in mortar around end tiles, and occasional lifted flashing around metal flus (the bungalows do not have chimneys). The concrete blocking the rounded tiles is missing on some buildings. Wooden canopies over the doorway are often badly warped; in a few cases this has caused a gap to open up where the canopy adjoins the bungalow (see Photo). Where this occurs, it could allow bat access to the soffits or to the hollow bitumen felt covered canopy. Most of the bungalows have concrete sheds with corrugated asbestos roofs. The corrugations would be accessible to bats, but pending an internal inspection, the sheds appear to have low potential as roost sites.

Description of Buildings: Terraces

The eastern section of the estate is dominated by two sets of terraced houses, each arranged symmetrically around a green.

Red Brick Terraces (Nos 530-533)

The southern group consists of four blocks of red brick two storey terraces, with pitched clay tile roofs and brick chimneys, probably dating from the 1930s (see Photo). They appear to have cavity walls. The buildings are generally sound and well sealed.

The main points of potential bat access occur in occasional gaps in the tiles and ridges, under flashing, and possibly where chimneys and flus emerge, although generally the roofs are sound. Ventilation grilles on the gables of most of these buildings could allow bat access into the wall space or roof void. The vents on building 533 have been meshed over, suggesting that these may indeed be otherwise accessible to birds or bats. There are also a number of bricks below these vents on the end wall with mortar missing (see Photo). These buildings do not have soffits and it was difficult to view potential access points under the eaves. Each house has a brick shed with corrugated roof.

White Render Terraces (Nos 535-540)

The northern group consists of six blocks of brick and render two storey terraces dating from 1925, with pitched tile roofs and chimneys (see Photo). The outer blocks consist of three dwellings knocked through from the original six. Likewise, the central blocks now contain five dwellings where once there were ten. The houses have dormer windows on the first floor and a tiled bay window on the ground floor. Walls are double thickness but may be solid.

Like the previous terraces, the buildings are generally well sealed. There are occasional gaps in tiles, and possibly around chimney breasts and waste pipes. A pronounced recess occurs at the junction of the dormer windows and the main roof. According to a resident, attics are small (<2m high at apex), with the original dividing walls still present. They are apparently insulated and felt lined but were not inspected by the surveyors.

Buildings 543 and 544

To the north of the white terraces, there are two more buildings of a similar style and period, although their windows are flush with the main buildings (see Photo). It appears that the end chimneys have been removed at some point and the cavities have been leaded over. The buildings are in good condition and are well sealed, with just a few gaps in tiles and some lifted flashing under remaining chimneys. It seems likely that existing roof spaces are low and with limited space.

Building 546.

This is a one off red brick 1930s house (see Photo) to the north of the terraces. It has a hipped slate roof in good condition, with a few minor gaps in the ridge and some lifted flashing under the two chimneys. There is also lifted flashing over the bay window and porch, and some minor cracking under the ground floor windows. A pebbledash garage with a corrugated roof lies to the rear.

Description of Buildings: Red Brick 1950s Semis (Nos 553-562)

To the north west, in a particularly exposed part of the estate, is a set of ten semi-detached houses with pitched tile roofs (see Photo). These potentially have the largest roof voids amongst the residential houses, possibly 2-3m at the apex. Tiles and soffits are generally well sealed, but there are a number of potential bat access points, especially on the south facing roofs of the southern most houses. These have gaps in tiles and ridges, as well as some prominent drainage holes and a broken grille on building 561. Ceramic ventilation grilles in the walls have large holes (approx. 2cm by 4cm), but it was unclear whether a finer mesh is located behind them. It was not possible to examine the rear of the houses due to their configuration.

NON-RESIDENTIAL

Overview

The rest of the estate is made up of various ancillary buildings, most of which are concentrated at the north end, and some of which are disused or derelict. These divide into three main areas; the north-west corner, the water treatment works and central area, and the north-east corner - which includes the supermarket and nursery school (see Map).

Description of Buildings: North-west Corner

This very exposed area incorporates a concrete drain with tanks of standing water set in the ground (No 568). There is a raised platform with a metal container (No 291) some 30m up, which presents virtually no opportunities for bats. The concrete hut at its base has a corrugated asbestos roof and a broken door, which

would allow bats access, but seems to offer little potential otherwise. It was not possible to inspect the interior.

The single storey breeze block hut next door (No 546) is derelict and boarded up. It has a flat roof, with a wooden panel fixed to the wall below the roof. This is warped and coming away from the wall in places (see Photo), especially on the south side, and may offer roosting opportunities for bats such as pipistrelles. There may also be potential bat access to the interior on north side. No signs of bats were found.

No 588 is a breeze block factory building, with few windows and is now derelict. The slightly pitched roof was out of view. Windows are broken on the east side and ventilation covers are hanging off, which could allow bat access to the interior but, based on the external signs, few suitable roosting positions are likely to exist. There are asbestos warning signs on the door.

Description of Buildings: Water Treatment Works/ Central Area

Nos 565 and 573 appear to be large concrete water tanks with no opportunities for bats. Likewise, an open electricity sub-station (No 548) and two metal water tanks (No 552) have no structures likely to support bats. A brick flat roofed pumping station (No 551) is in use and tightly sealed, with no visible access points.

Another brick substation (No 564) in the treatment works cluster has greater bat potential, due to a missing bargeboard from the south end gable (see Photo). This would allow open access to roof tiles for birds and bats, and nesting material could be seen here. Otherwise, it was well sealed.

At the east end of this group is a derelict former launderette (No 547) (see Photo). It is a single storey red brick building, with a hipped tiled roof and a number of small extensions on the south and west sides. There are numerous potential points of access for bats; to the interior; to the cavity wall, which is broken open on the east elevation; and to a possible roof void – the height of the suspended ceiling suggests that this could be large. Tiles are slipped and missing, windows are broken and there is thick ivy and open vents on the west side (see Photo).

Buildings 549 and 572 are large metal framed and brick buildings dating from the 1960s, used as an activity centre and as a chapel respectively (see Photo). The construction materials of both buildings –incorporating metal supports and plastics, offer little potential for bats. The activity centre is especially well sealed, with a large metal paneled roof. There is a brick boiler room at the rear of the chapel, which has a wooden ventilation panel that could allow bat access to the interior.

Description of Buildings: North-east Corner

This area incorporates the most recent buildings on the estate, dating from the 1970s and 1980s. The supermarket (No 492) is fronted by a large car park, fringed with a number of semi-mature Beech *Fagus* sp, which are amongst the more substantial trees on the estate. The building itself is brick built with a large riveted

metal roof and is mostly well-sealed. On the north side, however, is a large hole in the brickwork, which gives at least limited access to the wall cavity. There were bird droppings inside and beneath the hole (see Photo). To the rear, an abandoned petrol station (No 493) has a hole in the fabric of the metal canopy covering the old forecourt. A brick bus shelter to the north of the supermarket has a slate roof, with some gaps/slates missing. There may be access to a limited cavity under the roof.

Part of Building 442 contains a nursery/pre-school, but the east half is currently unoccupied. It is a large single storey brick structure in good condition, with a slate roof (see Photo), possibly containing a series of limited roof voids. There are a number of flues, which appear to be well sealed. On the south side, there are gaps under hanging slates and flashing on the gable ends. Although largely obscured from view, there is a large canopy over the south doors and there appear to be gaps underneath that could allow access to the interior of the canopy.

Description of Buildings: Miscellaneous

There is a small concrete built pumping station (No 779) that is in use and located amongst the bungalows on the south east of the estate. It has a pitched tile roof with no obvious gaps and, viewed through the window, seems not to have a roof space. A hole in the south wall where a pipe enters would allow bat access but there are no signs, the building is light and few suitable roost locations are apparent.

EVALUATION AND RECOMMENDATIONS

Bat Evidence

No evidence of occupation by bats was found during the external inspection of buildings in the Heyford Park Housing Estate. It is not possible, however, to make a more comprehensive assessment of whether buildings currently support bat roosts without a closer examination of some exterior features and internal inspection of loft spaces. Therefore a more detailed inspection is recommended of those areas of the estate highlighted below, which have some features that could make them suitable for bats.

Assessment of Bat Potential Based on External Survey Only

Much of the housing estate is very exposed to winds, with little vegetation cover that would provide obvious flightlines or feeding areas for bats. Large arable fields partly surrounding the estate are also likely to provide sub-optimal habitat for most bat species. Nevertheless, there have been anecdotal reports from residents of bat activity in the estate and bats have been recorded in the vicinity during previous surveys conducted by EPR. There is a small amount of standing water on the site, which could attract insects during warmer weather and therefore serve as feeding stations for bats (see Map)

Buildings have been assessed superficially for their potential to be used by bats, based on the presence of features such as possible large roof voids, uneven roof covering with some gaps, access holes, low disturbance, areas warmed by the sun, proximity to vegetation or water. No buildings were assessed as high potential,

largely due to their construction and the exposed setting of most of the estate, but it should again be emphasised that the survey was constrained in scope.

Priorities for Further Assessment

Further survey (including internal inspection of roof voids where present) should prioritise the following buildings:

Brick semi detached houses (Nos 553-562), derelict launderette (No 547) which are assessed as having medium potential to be used by bats.

All the terraces (530-540, 535-540, and building 546) are assessed as potentially medium value for bats and it is recommended that at least a sample of roof voids be examined as well as conducting activity surveys in this area.

The bungalows are difficult to assess due to their unusual construction and uncertainty about roof void construction and size. At least some of these could have medium value for bats and it is recommended that internal survey is undertaken on those with potential bat access features as listed in Appendix.

Any future emergence surveys should include at least some of the buildings from each of the above groups, ideally after narrowing down individual buildings with higher potential through internal inspection.

Most of the non-residential buildings are likely to have low value to bats due to their construction, but more thorough survey including internal inspection could reveal features of higher value. Exceptions could be Buildings Nos 546, 564, 460 and 442, which had features with potential. In the case of 442, very little of the external fabric and none of the interior could be inspected. Any future emergence surveys should include these four buildings. Residential buildings 543 and 544 were well sealed and appear to offer low value to bats, but internal inspection would provide a better assessment.

INTERNAL INSPECTION OF BUILDINGS (BAT SURVEY) – AREA 2, HEYFORD PARK

Methodology

Site visits were conducted by David Andrews and Catherine Greenhough of EPR from 6 June to 8 June 2007 and by David Andrews and Sarah Hobbs of EPR on 13 June 2007. Internal inspections for bats or signs of bats were undertaken on 89 residential buildings in Area 2 – see Map, covering all the main residential building types on this estate. These buildings had previously been inspected externally by EPR for their suitability to support bats in terms of materials, structure and potential bat access points. Further systematic external survey was not undertaken during these inspections.

Internal walls, roofs and floors were searched for signs that bats may be using, or have recently used, the buildings for roosting. Such signs may include bat droppings and staining or scratch marks. Internal inspection of roof spaces was undertaken using a powerful torch to illuminate dark areas. Roof spaces were entered where it was considered safe to do so or otherwise were inspected from a hatchway.

Constraints

Bats may roost in crevices such as those between roofing material and underlying boards, or in cracks/ holes in walls. This can mean that neither the bats nor their signs are visible to the surveyor during a building inspection.

The internal surveys were severely time constrained in order to inspect as many buildings with bat potential as possible within the period made available to EPR. Many of the buildings, especially the bungalows, have had new fibreglass insulation fitted between November 2006 and June 2007. Signs of bats that predate this period would have been largely obscured. High levels of dust and debris in those buildings with old insulation may also mean that signs of bats could have been missed.

Results

The 89 buildings inspected during this survey are identified in Map and descriptions provided in Appendix. Evidence of bats in the form of bat droppings was found in 13 buildings across the estate; 9 bungalows and 4 two-storey buildings. Inspection of a further 13 buildings was attempted during the survey but access was not possible (residents were not in, lofts not accessible etc).

Appendix

Heyford Park Estate – Bungalows with potential bat access features.

(those marked * show most significant access points)

Road/Number	Feature
Harris Road	
770, 771	Cement missing under lower tiles
768	Gap under end ridge tile (west)
746, 756*, 760*, 766	Lifted tiles/gaps – south facing
761	Lifted tiles – north facing
Tait Drive	
720*	Gaps under tiles/ridge – west facing. 720B – Gap between porch cover and soffit.
742	Gaps under tiles/ridge

Road/Number	Feature
Reid Place	
751	Lifted tile – east facing
753	Lifted tile – west facing
Bader Drive	
731, 733, 735	Gaps under tile – east facing
723	Gap under ridge – west end
722*, 724*, 726, 728	Lifted tiles/gaps – south facing
736	Gaps under tiles – west facing
Nettleton Drive	
775*	Unoccupied - large gap in ridge tile
774*	Lifted tile, gap between porch cover and soffit
Portal Drive South	
713	Porch disintegrating, access inside porch cover?
709*	Unoccupied – large break in ridge
710	Gap in cement under north end tile
712*	Gap under apex – north end ridge tile
714	Minor gaps under tiles – west facing
718*	Gap under ridge tile
Portal Drive North	
684	Minor gaps under tiles – south facing
686	Gap under ridge tile
Gibson Drive	
700, 701*	Unoccupied - gap between porch cover and soffit
700*	Broken vent, gap in ridge
702	Minor gaps in tiles at west end
706	Unoccupied
Eady Road	
652, 675	Unoccupied
661*	Gaps in tiles/ cement missing under lower tiles
662*	Gaps in tiles – large gap near ridge
Cheshire Road	
664	Gap under ridge
670*	Tiles missing or cracked - southeast facing
Whitley Drive	
659	Minor gap under tile

Upper Heyford - Internal Assessment for bats

Address		Comments	Loft Description	
1	Carswell Circle	Some cavities in end wall leading to neighbouring house in Northern loft, no obvious cavities in southern loft. no evidence found	2 Loft areas, each one approx 4m long, 3m wide and 1.5m high. Close boarding (wooden) with closely sealed felt behind it. Brick/rendered end walls, some with disused chimney. Dormer at front in many, with ventilation from small gaps or perspex. Further ventilation tiles at the end of end of terrace properties, some of which are covered with mesh. Many of these inhabited by birds.	
5	Carswell Circle	No obvious cavities noted. Mouse droppings and Small Tortoiseshell butterfly wings		
15	Carswell Circle	Cavity in northern loft in knot hole of close boarding to rear of house. No evidence found, dead flies and wasps		
8	Harris Road	A number of small rips in felt on southern side to rear of house and around flue. No evidence found	Large loft, approx 2m at apex. Vent in end wall. Thick insulation, sarking felt.	Externally- round roof tiles. Front of house - roof fairly well sealed although a couple of small chips in tiles creating small cavity. Gap in soffit box by front room window. Rear - gap beneath roof tile behind flue. Ridge well sealed. Gap into soffit by back door where wires enter. Cavity large enough for bat.

Address		Comments	Loft Description	
16	Carswell Circle	Gaps along eaves (daylight visible) through. No evidence found		
21	Carswell Circle	Gaps along eaves. Birds nesting in eaves to rear of house in N. Loft. 3 Bat droppings found in Southern loft on wooden platform. See diagram. No obvious access points noted apart from along eaves.		
14	Portal Drive North	No evidence found. Some gaps in sarking felt in apex in centre of loft space.	Same layout as Harris - large space with purlins. Very thick insulation. Flue and ventilation blocks set into felt.	Externally - front tiles seem well sealed, small gaps into soffit above front room. Rear - gap in roof tile behind flue. No other visible cavities/access points.
28	Carswell Circle	Nothern loft with moderate cobwebs. End walls rendered. Only cavity into adjoining loft space. No evidence found		
22	Carswell Circle	Red brick house. Close boarding in both lofts. Cavity in close bording on SW face - no evidence. Damp around it. Moderate cobwebs in Southern loft space.		
29	Carswell Circle	Only cavity into adjoining loft space. No bat evidence found.		
32	Carswell Circle	No evidence found, no obvious cavities noted.		

Upper Heyford Bat Surveys June 2007

Shaded box indicates roost

Gordon Road Roof apex Ca. 2.5m high. Loft space trussed (open) Ca. 6m wide by 9m long. Heavily insulated.
House Ca. 1950s. Part of loft not accessed in north west corner as walls from floor to ceiling (built 1980s (dated).

Portal Drive description

CARSWELL

Bungalows insulated December 2006- may 2007.

Address	Occupied/Accessed	Description	Bat Evidence/Features Bat potential
Bungalows			
2 Cheshire Road	Occupied		
4 Cheshire Road	Occupied		
16 Cheshire Road	No access – occupied		
6 Eady Road	Empty		
7 Eady Road	Occupied		
18 Eady Road	Occupied		
20 Eady Road	Occupied		
21 Eady Road	Occupied – not accessed		
3 Whitley Drive	Occupied		
1 Gibson Drive	Occupied		
4 Gibson Drive	Occupied- not accessed		
11 Gibson	Occupied		
1 Portal Drive North	Empty		
9 Portal Drive North	Occupied		A single, small, old dropping.
12 Portal Drive South	Empty		
9 Tait Drive	Not accessed		
8 Reid Drive	Not accessed		
8 Bader Drive	occupied		
28 Harris Road	Empty		
5 Nettledown	Empty		
11 Roper Road	Empty- not accessed		

Address	Occupied/Accessed	Description	Bat Evidence/Features Bat potential
Houses			
3 Gordon Road	Occupied		
5 Gordon Road	Occupied	Roof apex Ca. 2,5m high. Loft space trussed (open) Ca. 6m wide by 9m long. Heavily insulated. House Ca. 1950s. Part of loft not accessed in north west corner as walls from floor to ceiling (built 1980s (dated)).	1 old Pipistrelle like dropping found on south west side of loft on fibreglass. Two holes in black underfelt approximately half way down, half way along roof, on both sides.
9 Gordon Road	Occupied		
11 Gordon Road	Occupied	Used for storage (restricted access).	
15 Gordon Road	Occupied		
17 Gordon Road	Occupied		
1 Eady Road	Occupied	Same construction as dwellings on Gordon Road. Loft heavily insulated and not full accessed.	6-8 old, small droppings at northern end of loft on insulation. Externally gap into soffit box at rear (eastern side).
3 Eady Road	Occupied		
4 Roper Road	Occupied		
6 Roper Road	Occupied		
8 Roper Road	Occupied	Roof only partially lined with underfelt. Original loft insulation.	
19 Carswell Circle			
20 Carswell Circle			