

Badger Survey

Project Information

Site Name & Location	Twycross Zoo, Burton Road, Atherstone
Report Number	RT-MME-181541-01
Client Name	Baker Mallett LLP
Site Proposals	The proposed works are to include the demolition of the Lemur House, removal of several animal enclosures and clearance of trees and vegetation to make way for the construction of a National Science Conservation Centre.

Methods

Field Survey	The monitoring surveys were carried out between 27th November and 18th December 2024 by Charline Hue MSc, Senior Ecological Consultant and Thomas Weston MSc, Ecological Project Officer. The survey comprised the following elements: Habitat Assessment A habitat assessment was undertaken to identify the suitability of the site for use by badgers for foraging and sett excavation. This takes the nature of the surrounding landscape and connectivity with other areas of suitable habitat into account. Presence/Absence Survey The survey area was subject to a comprehensive walkover assessment for the presence of badger field signs. Such signs include badger setts, footprints, pathways, hairs, snuffle holes and latrine sites. Any signs recorded were plotted on an appropriately scaled map. Where possible, the survey included a 30 m radius around the proposed development site.			
Weather Conditions	27/11/2024	04/12/2024	11/12/2024	18/12/2024
Temperature (°C)	3	4	5	14
Cloud Cover (%)	100	95 (with fog)	100	100
Wind (Beaufort)	F2	F0	F1	F5
Precipitation	Very light intermittent rain	Nil/damp	Nil	Nil

Field Survey Results

A pre-works badger check was carried out on 8th November 2024; where an excavation of a shape and size indicative of use by badgers was discovered within an earth bund. Between 20 and 30 strands of badger hair were noted at the entrance and some snuffle holes were present in the vicinity. A path following the fence on the western boundary of the site was observed, and lead to a couple of push-unders leading onto Orton Hill Road; another path from the excavation lead to the other side of the bund, and could not be checked at that time due to dense and impenetrable vegetation.

A second entrance was uncovered during the vegetation clearance on 20th November 2024, following a path from the first excavation. This hole was smaller in size and did not exhibit any signs of use by badgers.

Drawing C181541-01 details the location of badger evidence recorded during the pre-works badger check and subsequent monitoring visits and is provided at the end of this document. Photographs taken during the field surveys and the results of each monitoring visit are presented below.

Excavation Monitoring Results	27/11/2024	04/12/2024	11/12/2024	18/12/2024
Entrance 1	No disturbance, no hair on trap and no new activity in surrounding area.	No disturbance, no hair on trap and no new activity in surrounding area.	No disturbance, no hair on trap and no new activity in surrounding area.	No disturbance, no hair on trap and no new activity in surrounding area.
Entrance 2	Hair trap slightly moved with mammal hair present (considered to be rabbit <i>Oryctolagus cuniculus</i>). No evidence indicative of badger.	Hair trap not dislodged, but more rabbit hair present.	No activity around entrance, or hair present on trap.	Hair trap not dislodged, small amount of rabbit hair present. No evidence indicative of badger.

Photographs



Plate 1: Entrance 1



Plate 2: Entrance 1 from above with spoil



Plate 3: Snuffle hole



Plate 4: Push-under the boundary fence

Potential Impacts on Badger

The area of scrub and woodland occupying the earth bund provides suitable habitat for sett excavation; furthermore, the semi-improved grassland, hedgerows, woodland, scrub, and tall ruderal vegetation on site offer suitable foraging habitat for badger with good connectivity to the wider landscape. The two holes which are considered to be of a of size and shape likely to have been excavated by badger have the potential to be directly and indirectly impacted by the proposals. Working areas, which include open excavations, will fall within proximity to entrance 1 and will result in the loss of entrance 2. However, these entrances have been monitored over a period of 4 weeks and no evidence of badger usage was found; therefore they are not considered to be in current use by badgers and no further work is required at this stage.

Actions/Recommendations

Following the negative monitoring result; entrance 1 was soft blocked with earth and wooden stakes in order to discourage badgers from using the entrance. Entrance 2 was left in situ as rabbit evidence was found and therefore it is considered likely that rabbits use this hole. Therefore no works should be undertaken to this excavation that might lead to the entrapment or suffocation of rabbits.

It is recommended that the area is checked on a regular basis and maintained unsuitable for badgers before the works start, by keeping the vegetation low. The buffer zone of vegetation that was maintained during the monitoring can now be cleared to ground level under ecological supervision.

If works are affecting either excavation, they should be undertaken under ecological supervision to prevent any harm to terrestrial mammals.

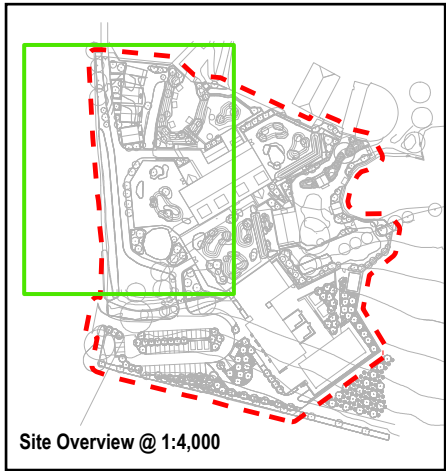
Should any fresh excavations considered to potentially belong to badger be identified during site works the activities should cease and an ecologist contacted for advice.

Quality Assurance

Date	Version	Author	Checked & Approved By
19/12/2024	Final	Charline Hue MSc (Senior Ecological Consultant) and Thomas Weston MSc (Ecological Project Officer)	Tim Hextell MCIEEM (Principal Ecological Consultant)



- Legend**
- Site boundary
 - Badger sett entrance with tunnel direction
 - Push through
 - Snuffle hole



Project	Twycross Zoo	
Drawing	Badger Evidence	
Client	Baker Mallett c/o Twycross Zoo	
Drawing Number	C181541-01	Revision 00
Scale @ A3	1:400	Date December 2024
Approved By	CH	Drawn By BD
 MIDDLEMARCH		
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