



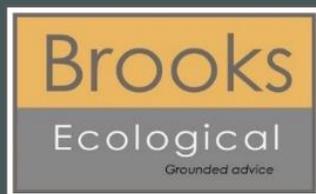
Land off Darton Lane, Mapplewell



Badger Assessment & Report

01/08/2023

Report Reference ER-6517-05



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Date	01/08/2023
Report duration	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.



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Summary Statement

No badger setts or other evidence of badger activity has been identified on- or immediately off-Site.

The current likely absence of badgers from Site can therefore be reasonably concluded.

Introduction

1. Subsequent to recommendations set out in Brooks Ecological's Preliminary Ecological Appraisal Report (ER-6517-01A), Brooks Ecological was commissioned to carry out detailed Badger Survey at Land off Darton Lane, Mapplewell (grid ref. SE 3197 0985).
2. The survey covered all land within the red line boundary, as well as any other suitable badger habitat adjacent to the Site that was accessible at the time of the visit. Figure 1 outlines the extent of the survey.

Purpose of a badger survey

3. Badgers and their setts are protected under the Protection of Badgers Act 1992, which makes it illegal to kill, injure or take badgers or to interfere with a badger sett. Interfering with badger setts can mean physically tampering with them or disturbing badgers while in their sett.
4. For these reasons the presence of badgers can constrain development sites where a sett is in an area directly affected by construction or lies close enough to unaffected setts to make disturbance likely. In these cases, the planned activity could be illegal without licensed mitigation.
5. In most cases it is best to plan around badgers and amend masterplans to retain badger setts where feasible. If retention is not possible, mitigation such as sett closure, deterrent fencing etc. may be needed. Any plan for how badgers will be dealt with legally is likely to be needed by the Local Planning Authority before they determine your application.
6. It is particularly important to note that mitigation and licencing is likely to have seasonal restrictions imposed which can hold up development programmes. Sett closure will not normally be permitted between December and June.
7. Good, up-to-date information is key, as is good planning. Badgers move around a lot and regularly make new setts so they can still turn up at any time on a site, even in the middle of construction where they can be attracted to soil stores etc. Bearing this in mind it is a standing recommendation to carry out pre-clearance checks, for site managers and workers to remain vigilant for new holes dug in the ground, and to have systems in place to confirm the status of these should they be found.

Background

8. Barnsley Metropolitan Borough Council has returned three records of badger, all of which are located >400m away within unconnected habitat.
9. The PEA walkover survey identified a small number of mammal entrance holes along the banking of the dismantled railway line to the south adjacent to the Site's south.

Figure 1 Site Boundary and survey area.



Method

10. A walkover survey was carried out on 4th July 2023 by an experienced ecologist with significant experience of badger survey, mitigation and licencing, and who is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).
11. The Site was thoroughly searched for evidence of badger activity by looking for the following signs:
 - Badger setts
 - Badger latrines or dung pits
 - Badger snuffle holes and evidence of foraging
 - Badger paths
 - Badger footprints in areas of soft mud
 - Badger hairs caught on fencing
12. In addition, a remote camera trap was set up to monitor a group of mammal holes and left to run for >2 weeks.
13. Badger setts are assessed and classified according to the level of use and the number of entrance holes – see Box 1.

Limitations

14. The majority of the Site was fully accessible, with exceptions being the dense pockets of scrub to the west and east of the Site. However, the Site has been subject to various ecological surveys since early spring 2023 and these areas have been subject to *ad hoc* inspection when vegetation was still in dormancy.
15. A treed former railway line forms the boundary to the south. This also supported dense vegetation and some areas could not be closely inspected.

Box 1 Badger setts

Badgers live in social groups called clans and are territorial. Each clan territory can vary considerably in size, from 0.2-1.5km². The average number of badgers in a clan is six, but this number can vary between two and twenty badgers.

In areas with a significant badger population there will be contiguous clans and a well-defined boundary between clan territories will exist, with the badgers scent-marking their boundary with areas of dung pits called latrines. In areas with relatively low badger populations, there will be less competition for territory and the amount of territorial markings will be low or even non-existent.

Setts are classified into four ancillary types – main, annexe, subsidiary, and outlying – as follows:

Main sett: These are large, well-established setts, normally in continuous use. Each group will use only one main sett and it will form the most likely location for the raising of cubs.

Annexe sett: These setts are usually found in close association with the main sett, and will often be linked to it by a well-worn path. Where a second litter of cubs is born, they will be raised in the annexe sett.

Subsidiary sett: Subsidiary setts will usually have five or more holes, although not all of these will be in continuous use.

Outlying sett: These setts are used on an occasional basis and will usually consist of only one to three holes. Soil heaps will generally be smaller than those found associated with the other sett types, indicating a smaller underground structure.

The entrance holes to setts can provide an indication as to the level of use of the sett. Entrance holes can be classified as follows:

Well used: These holes are in regular use and therefore free of debris. They may have been recently excavated.

Partially used: Debris, including leaves, twigs, and other vegetation, clutters the entrance to these holes, indicating they are not in regular use. The holes can be used after a minimum of clearance.

Disused: A considerable amount of clearance is needed before these holes can be used. The holes may become so blocked that only a depression in the ground is visible where the hole used to be.

Results

Walkover survey

16. The Site supports unmanaged grassland, areas of scrub and scattered trees and adjoins a former treed railway line to the south. Overall, the Site and off-Site habitat supports suitable sett building, foraging, and commuting habitat.
17. The Site was subject to detailed survey on 4th July 2023, although the Site has undergone numerous *ad hoc* visits over the previous months as part of other ecological survey work.
18. Two small groups of mammal holes are present along the railway embankment, just off-Site. One group was considered too small for badger and attributable to rabbit. No mammal holes were identified on-Site.
19. Mammal tracks also pass through the Site and, to a much greater degree, off-Site railway habitats, the latter being likely heightened by numerous dog walkers.
20. No specific evidence of badger was recorded, such as footprints, latrines, or hairs, either on- or off-Site. Foraging evidence by mammals was identified throughout.

Remote Camera Traps

21. A remote camera trap was left to record the larger group of mammal holes on 25th May 2023 and was collected 15 days later.
22. Over the >2 week period, no evidence of badger was recorded.
23. Dog, rabbit, grey squirrel, and field mouse were the only mammals recorded on the camera, with rabbit recorded using the holes.

Figure 2 Summary of badger survey on 4th July 2023.

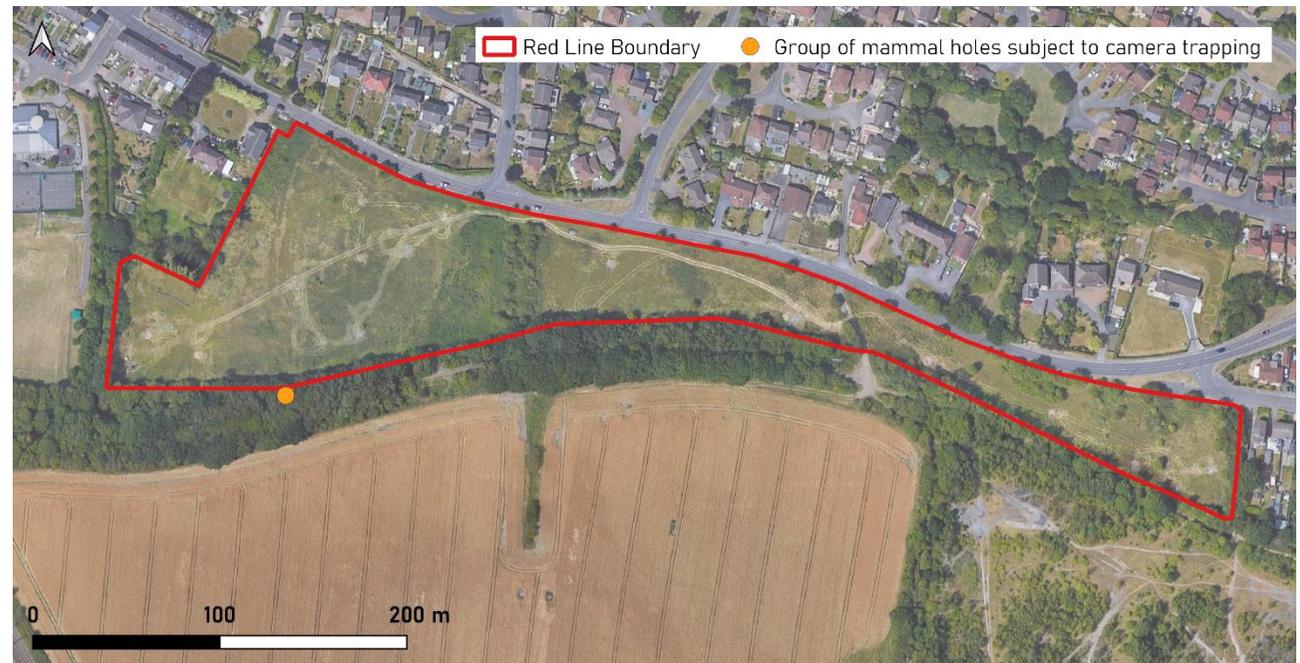


Figure 3 View of survey area within Site.



Figure 4 View of former railway line off-Site to south.



Figure 5 Mammal tracks along railway embankment.



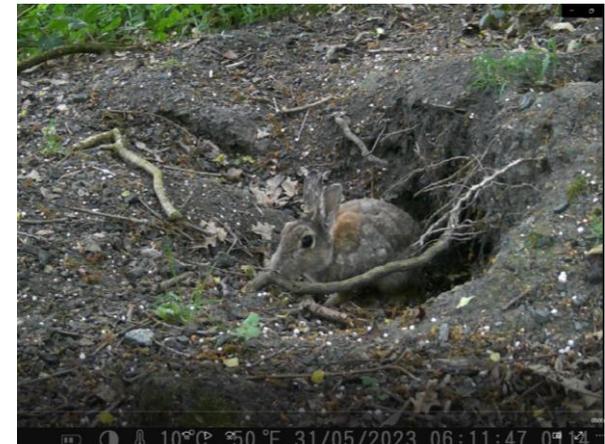
Figure 6 Mammal holes subject to camera trapping.



Figure 7 Foraging activity along railway embankment.



Figure 8 Rabbit exiting hole on 31st May 2023.



Conclusions & Recommendations

24. The likely absence of badgers from the Site can be reasonably concluded and further survey at this time is not considered necessary.
25. Should a significant amount of time elapse (>18 months as per CIEEM guidance), an updating survey is recommended.

References

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