



ENVIRONMENTAL STATEMENT
VOLUME 2
APPENDIX 9.4 – HAZEL DORMOUSE REPORT



Great Wolf Resorts

BICESTER GOLF COURSE

Dormouse Survey Report





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Dormouse Survey Report

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EXECUTIVE SUMMARY

WSP were commissioned by Great Wolf Resorts (GWR) to undertake a suite of ecological surveys to support proposals to develop land to the north-west of Bicester Golf Course. This development will hereafter be referred to as the 'Proposed Development'. The Proposed Development comprises the construction of a resort hotel with access to be taken from A4095, which runs along the northern boundary of Bicester golf course.

The Site is situated on a golf course which is flanked by deciduous woodland and dense scrub areas, providing suitable habitat for Hazel dormice *Muscardinus avellanarius*.

To establish whether dormice are present or likely absent, dormouse tubes were installed within suitable habitat on the Site in May 2018 and checked once a month from June to November 2018 (inclusive). Nest tubes were installed within suitable habitat in the north west of the Site which will be affected by the Proposed Development, extending to some additional suitable habitat on the northern Site boundary. Nest tubes were installed at 20m spacing within suitable habitat within the Site and checked on a monthly basis, excluding July. The survey work was completed in accordance with current good practice guidance (English Nature (now Natural England), 2006).

No dormice or evidence of dormice were found within any nest tube and the surveys obtained the 20 points necessary for the probability score index; therefore dormice can be considered likely absent from the Site.

As dormice are considered likely absent from the Site relevant legislation and planning policy is included for information only and does not place constraints upon the Proposed Development.

1. INTRODUCTION

1.1. PROJECT BACKGROUND

1.1.1. Great Wolf Resorts (GWR) are planning a redevelopment of land to the north-west of the Bicester Golf Hotel and Spa located off the A4095. The 'Proposed Development' includes a redevelopment of land in the north west of the golf course by means of:

- the creation of a 500-bed all-inclusive resort hotel, with an indoor pool and leisure complex, targeted at families and golf enthusiasts; and
- access road to be taken from the A4095

1.1.2. The land which would be affected by the Proposed Development is included in the Survey Area which is shown on Figure 1.

1.1.3. It is understood that a planning application will be submitted prior to any works.

1.2. ECOLOGICAL BACKGROUND

1.2.1. A Preliminary Ecological Appraisal (PEA) was carried out with respect to the Proposed Development in February/March 2018 (WSP, 2018). This included a desk study which found no records of hazel dormice *Muscardinus avellanarius* within 2km of the Site in the records returned by Thames Valley Environmental Records Centre (TVERC).

1.2.2. The PEA found that woodland, hedgerow and scrub present at the Site provide suitable habitat for hazel dormice. Habitats with potential for use by hazel dormice will be lost through the construction of the Proposed Development. The PEA therefore advised that hazel dormouse presence/absence surveys should be undertaken to ensure conformation with current planning policy and legislation, as detailed at 4.2 and 4.3.

1.3. BRIEF AND OBJECTIVES

1.3.1. GWR commissioned WSP to complete a dormouse survey in accordance with good practice guidance (English Nature (now Natural England), 2006) to:

- Establish whether dormice are present or likely absent from the Site; and
- If present, evaluate the value of the Site for dormice and make recommendations as to how proposals should account for dormice with respect to legislation, planning and biodiversity policy.

1.3.2. The results of this survey, and subsequent recommendations, are included within this report.

2. METHODS

2.1. OVERVIEW

2.1.1. To establish whether dormice are present or likely absent dormouse tubes were installed within suitable habitat on the Site in May 2018 and checked once a month or bi-monthly from June to November 2018 (inclusive). The survey work was completed in accordance with current good practice guidance (Natural England, 2006).

2.2. DORMOUSE SURVEY

2.2.1. Fifty-three dormouse tubes were installed within the Site on the 23 May 2018. Nest tubes were installed at approximately 20m spacing within suitable habitat on the Site (comprising woodland edge, dense scrub and hedgerows), attached to branches of a variety of native woody species. Species to which tubes were attached included hawthorn *Crataegus monogyna*, field maple *Acer campestre*, hazel *Corylus avellana*, ash *Fraxinus excelsior* and elm *Ulmus minor*.

2.2.2. All nest tubes on the Site were surveyed under suitable weather conditions between June 2018 and November 2018. This duration of survey scored 20 points, which is sufficient evidence to conclude likely absence in accordance with best practice guidance (Natural England 2006). A survey was not completed in July. As guidance suggests, surveys can be completed bi-monthly and still gain the points for the months not surveyed. Therefore, August's survey achieves the points for July as well. During each survey every tube was checked for presence of dormice or evidence of dormice, for example characteristic nests or opened nuts. Guidelines use a presence/likely absence probability index based on 50 nest tubes deployed on Site (Bright et al., 1996). A score of 20 is necessary to judge presence/ likely absence of dormice on Site.

2.2.3. The nest tube survey was designed to ensure effective coverage of the suitable hazel dormouse habitat within the Site. Results are summarised in Table 1 below; showing points accredited using the index. Nest Tube locations are shown in Figure 2.

Table 1 - Dormouse presence/likely absence probability index results scores

Month	Index of Probability (if using 50 tubes)	Survey results	Points Awarded
April	1	NA	0
May	4	NA	0
June	2	Absence	2
July	2	Not surveyed – inferred absence	2
August	5	Absence	5
September	7	Absence	7

October	2	Absence	2
November	2	Absence	2
Total Available:	25	Total Awarded:	20

2.3. DATES OF SURVEY AND PERSONNEL

- 2.3.1. The dormouse surveys were completed by an experienced surveyor with a Natural England level 1 dormouse survey licence, number: 2016-21700-CLS-CLS
- 2.3.2. The surveyor has 6 years' experience of ecological survey, including extensive dormouse survey experience and has held a dormouse survey licence since 2010.
- 2.3.3. Dates of survey are summarised in Table 2 below.

Table 2 - Dates of survey

Survey Number	Set-up	1	2	3	4	5
Date	23 May 2018	25 June 2018	24 August 2018	25 September 2018	23 October 2018	30 November 2018

2.4. NOTES AND LIMITATIONS

- 2.4.1. Guidelines (Natural England 2006), suggest that Dormouse surveys can be completed on a bi monthly basis where necessary. All months were surveyed except July which achieved its points through the August survey visit. It is therefore considered that this is not a limitation to the results.

3. RESULTS

- 3.1.1. No dormice or evidence of dormice were found within any nest tube and as such dormice can be considered likely absent from the Site. No feeding material or other species of mice for example, wood mice *Apodemus sylvaticus*, were recorded in any tubes throughout the survey.
- 3.1.2. Given that the surveys obtained the 20 points necessary, it can be concluded that dormice are likely absent from the Site.

4. IMPLICATIONS FOR DEVELOPMENT

4.1. OVERVIEW

- 4.1.1. As dormice are considered likely absent from the Site, relevant legislation and planning policy is included below for information only, and does not place constraints upon the Proposed Development.

4.2. LEGAL COMPLIANCE

- 4.2.1. Dormice are afforded a high level of protection under the Conservation of Habitats and Species Regulations 2017 (the 'Habitat Regulations'), the legislation means that it is an offence to:
- *'Deliberately capture, injure or kill a wild dormouse;*
 - *Deliberately disturb wild dormice; 'disturbance of animals includes in particular any disturbance which is likely:*
 - (a) to impair their ability —
 - (i) to survive, to breed or reproduce, or to rear or nurture their young; or
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
 - (b) to affect significantly the local distribution or abundance of the species to which they belong.'
 - *Damage or destroy a breeding site or resting place used by this species.'*
- 4.2.2. The dormouse is also listed as a Species of Principal Importance (SPI) for the Conservation of Biodiversity in England in accordance with Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Under Section 40 of the NERC Act (2006) public bodies (including local planning authorities) have a duty to have regard for the conservation of SPI when carrying out their functions, including determining planning applications.

4.3. PLANNING POLICY COMPLIANCE

- 4.3.1. At the national level the National Planning Policy Framework (2012) forms the basis for planning system decisions with respect to conserving and enhancing the natural environment, including dormice; the ODPM circular 06/2005 also provides supplementary guidance, including confirmation that *'the presence of a protected species is a material consideration when a planning authority is considering a development proposal'*.
- 4.3.2. The NPPF sets out, amongst other points, how at an overview level the *'planning system should contribute to and enhance the national and local environment by:*
- *...recognising the wider benefits of ecosystem services; and*
 - *minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures...'*
- 4.3.3. A list of principles which local planning authorities should follow when determining planning applications is included in the NPPF, and includes the following:
- *'- if significant harm resulting from a development cannot be avoided...adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

- - ...opportunities to incorporate biodiversity in and around developments should be encouraged;
- - planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland...unless the need for, and benefits of, the development in that location clearly outweigh the loss...'

4.3.4. Local Planning Policy is of reference to wildlife. For example, Policy ESD 10 of the Cherwell Local Plan (2011) states '*Relevant habitat and species surveys and associated reports will be required to accompany planning applications which may affect a site, habitat or species of known or potential ecological value*'.



5. CONCLUSIONS

- 5.1.1. Dormice presence was not recorded during any survey visit at the Site. Given that the survey design and effort complied with published guidance, its therefore considered that dormouse are likely to be absent from the Site. No avoidance, mitigation or compensation measures are therefore required for dormouse within the Proposed Development.

6. REFERENCES

6.1. PROJECT REFERENCES

- WSP (2018) Preliminary Ecological Appraisal – Bicester Golf Course

6.2. TECHNICAL REFERENCES

- Chartered Institute of Ecology and Environmental Management (CIEEM) (2016) Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland, Terrestrial, Freshwater and Coastal.
- Bright, P., Morris, P. and Mitchell-Jones, A.J., 1996. *The dormouse conservation handbook*. English nature. Her Majesty's Stationary Office (HMSO) (1981).
- Wildlife and Countryside Act (as amended by the Countryside and Rights of Way Act 2000)
- HMSO (2006) Natural Environment and Rural Communities Act.
- HMSO (2017). The Conservation of Habitats and Species Regulations 2017 (the Habitat Regulations)
- Joint Nature Conservation Committee (2010) UK priority species pages version 2 *Muscardinus avellanarius*. Available: http://jncc.defra.gov.uk/_speciespages/462.pdf, accessed [January 2019]




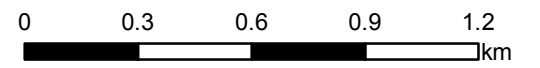
7. FIGURES

Figure 1 - Site Location Plan

Figure 2 - Dormouse Survey Results



Key
 Survey Area

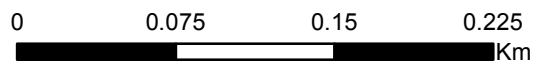


Client:	Great Wolf Resorts
Project:	Bicester
Title:	Site Location Plan

Drawing No:	Figure 1	Drawn:	BW
Date:	March 2019	Checked:	MH
Scale:	20,000 @ A3	Approved:	LR



- Key
- Survey Area
 - Dormouse Nest Tubes



Client:	Great Wolf Resorts
Project:	Bicester Golf Course
Title:	Dormouse Nest Tube Locations Plan

Drawing No: Figure 2	Drawn: RD
Date: March 2019	Checked: LR
Scale: 3,570 @ A3	Approved: AH



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