

## **APPENDIX 8.7A**

# **HAZEL DORMICE REPORT**

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Turnip Hall Farm, Saffron Walden

## Dormouse Survey Report

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For: Harris Lamb

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Produced By:

Cotswold Ecology Ltd

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## General Notes

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of Cotswold Ecology Ltd.

Contents

1 Introduction..... 3

1.1 Purpose of the Report ..... 3

1.2 Background Information ..... 3

1.3 Habitat Description..... 3

1.4 Structure of the Report ..... 3

2 Methods..... 5

2.1 Nest Tube Survey..... 5

2.2 Nut Search..... 5

2.3 Personnel ..... 6

2.4 Timings ..... 6

2.5 Survey Constraints..... 7

3 Results and Conclusions ..... 8

3.1 Survey Results..... 8

3.1.1 Nest Tube Survey ..... 8

3.1.2 Nut Search..... 8

3.2 Evaluation and Conclusions..... 8

4 References ..... 9

5 Figures and Plates..... 10

## Executive Summary

1. This report describes the results of surveys for Dormouse (*Muscardinus avellanarius*) carried out by Cotswold Ecology Ltd at Turnip Hall Farm, Radwinter Road, Saffron Walden CB10 2JZ (Ordnance Survey Grid Reference TL557382 in the centre of the site).
2. A habitat appraisal was carried out on 13<sup>th</sup> April 2021. The site is bounded to the south and south-east by agricultural fields bounded by hedgerows. The site boundary hedgerows contain a good diversity of species and structural integrity usually associated with suitable Dormouse habitat. The habitats are also connected to suitable Dormouse habitat and as such, the boundary hedgerows were considered suitable for Dormouse.
3. The boundary hedgerows are likely to be impacted by the proposals and so presence/absence Dormouse surveys were carried out including Dormouse nest tube surveys and a nut search. The surveys were carried out according to best practice guidelines (Bright et al. 2006). The 98 nest tubes were deployed on 12th April 2021 and collected on 30th September 2021 and were checked on three occasions.
4. No evidence of Dormouse was recorded and it is likely that they are absent from the site. The results mean that no further surveys, mitigation or European Protected Species licence would be required in respect of this species in order for development to proceed.

# 1 Introduction

## 1.1 Purpose of the Report

This report describes the results of surveys for Dormouse (*Muscardinus avellanarius*) carried out by Cotswold Ecology Ltd at Turnip Hall Farm, Radwinter Road, Saffron Walden CB10 2JZ (Ordnance Survey Grid Reference TL557382 in the centre of the site). A site location plan is provided in Figure 1.

## 1.2 Background Information

A habitat appraisal was carried out on 13<sup>th</sup> April 2021 by a licensed Dormouse ecologist to assess the habitat on the site for its potential to support Dormouse. The results indicated that the hedgerows on the site boundaries contained a species diversity and structural integrity usually associated with suitable Dormouse habitat. Phase 2 surveys to determine the presence or likely absence of the species were recommended. Cotswold Ecology Ltd were instructed in April 2021 to carry out the Phase 2 Dormouse surveys.

## 1.3 Habitat Description

The site is bounded to the south and south-east by agricultural fields bounded by hedgerows. The site boundaries support hedgerows that are generally intact and thick containing a good mixture of species including *Corylus avellana* (Hazel), *Prunus spinose* (Blackthorn), *Fraxinus excelsior* (Ash), *Sambucus nigra* (Elder), *Acer campestre* (Field Maple), *Aesculus hippocastanum* (Horse Chestnut) and *Quercus robur* (Pedunculate Oak) with *Rubus fruticosus* agg. (Bramble), *Clematis vitalba* (Travellers Joy) and *Rosa canina* (Dog-rose) throughout. The diversity of species would provide a good foraging resource for Dormouse throughout the active period and would provide nesting and hibernation opportunities.

## 1.4 Structure of the Report

The remainder of this report is structured as follows:

- Section 2 describes the survey and assessment methods and constraints;
- Section 3 presents the survey results and conclusions;
- Section 5 lists the references; and

- Section 6 provides figures.

## 2 Methods

### 2.1 Nest Tube Survey

Dormouse surveys were carried out according to best practice guidelines set out in the Dormouse Conservation Handbook (Bright et al., 2006).

The site was surveyed for the presence of Dormouse by installing 98 nest tubes within suitable hedgerow habitat (all hedgerows on the site). Tubes were located approximately 20 m apart and were fixed underneath horizontal branches with entrances facing the centre of the tree. A plan of the hedgerows surveyed for Dormouse is provided in Figure 2.

Dormouse nest tubes are considered an effective means of surveying hedgerows, scrub and other habitat where tree holes and other nesting sites are generally absent. Other species such as Wood Mouse (*Apodemus sylvaticus*) or birds may use Dormouse tubes. However, Dormice build nests that are readily identifiable as they are characteristically woven, often incorporating green leaves.

To provide an indication of the thoroughness of a survey for Dormouse, a score can be derived based on an index of probability of finding Dormouse in any one month as shown in Table 1 below. The overall score may be increased or decreased proportionate to the actual number of tubes deployed within a survey area. A minimum overall score of 20 is required in order to have confidence in a negative (likely absent) result.

The 98 tubes were deployed on 12th April 2021 and collected on 30th September 2021, giving a score of 21.

### 2.2 Nut Search

A nut search for gnawed hazelnuts, characteristic of Dormouse presence was carried out during the survey at the end of September 2021. Hazelnuts were collected from across the site, where present) which has been opened by small mammals, avoiding caches (as Dormouse do not cache food) and ignoring nuts opened by squirrels. All collected nuts were inspected for the characteristic marks left by Dormice, which leave a smooth round opening with teeth marks at an angle to the hole on the nut surface.



**Table 1. Index of Probability of finding Dormice present in nest tubes in any one month (Bright et al., 2006).**

Month	Score (Index of Probability) 50 tubes
April	1
May	4
June	2
July	2
August	5
September	7
October	2
November	2
<b>Total Score</b>	<b>21</b>

## 2.3 Personnel

Tubes were checked for Dormouse by James Pattenden, Natural England dormouse licence holder (reference 2016-21635-CLS-CLS). James is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and has 16 years of experience in ecological consultancy.

## 2.4 Timings

Survey timings are detailed in Table 2 below.

**Table 2. Survey dates**

Survey	Survey Date
Tubes Deployed	12.04.21
Tube Check 1	24.05.21
Tube Check 2	28.07.21
Tube Check 3, nut search and collection of tubes	30.09.21

## **2.5 Survey Constraints**

Where habitat is optimal, Dormice will favour natural nest sites such as hollow tree branches, old bird's nests etc., which can mean that the artificial nest tubes are not used. Despite this, although it is virtually impossible to prove that Dormice are absent from any area of suitable habitat within their range, an adequate survey will give confidence that any significant populations will have been detected (Bright et al., 2006).

There is not a large amount of Hazel present in the hedgerows and as such, the nut search was restricted in the number of Hazelnuts to be examined. However, the nut search is only considered an additional survey tool to compliment the nest tubes survey, and would not be used as evidence of absence of Dormouse. The limited number of Hazelnuts present would therefore not be a significant constraint on the survey conclusions.

This data can be considered to be accurate for a maximum of 12 months from the survey date. If more than one year elapses prior to commencement of the works, the survey findings should be reviewed and it may be necessary to repeat the surveys in order to ensure up-to-date information.

### **3 Results and Conclusions**

#### **3.1 Survey Results**

##### **3.1.1 Nest Tube Survey**

No Dormouse nests were recorded during the nest tube surveys. A small number of nest tubes were occupied by Wood Mice nests or contained evidence of Wood Mouse such as food caches.

##### **3.1.2 Nut Search**

A survey of the limited number of Hazelnuts used as part of the nut search recorded no nuts that were confirmed as being opened by Dormouse.

#### **3.2 Evaluation and Conclusions**

No evidence of Dormouse was recorded and it is likely that they are absent from the site. The results mean that no further surveys, mitigation or European Protected Species licence would be required in respect of this species in order for development to proceed.

## **4 References**

Bright, P., Morris, P and Mitchell-Jones, T. (2006). The Dormouse Conservation Handbook (2<sup>nd</sup> edn).  
English Nature, Peterborough. ISBN-1-85716-219-6

## 5 Figures and Plates

Figure 1: Site Location

Figure 2: Dormouse Tube Locations





