

Technical Guidance Series



Chartered
Institute of
Ecology and
Environmental
Management

In association with



Competencies for Species Survey: Hazel Dormouse



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1. Introduction

The purpose of this document is to set out the knowledge, skills and experience required to survey, disturb or to carry out research works (hereinafter referred to generically as 'survey') for the hazel dormouse *Muscardinus avellanarius*. To be undertaking work as a professional, CIEEM would consider attainment of the criteria outlined in this guidance to be a minimum for an individual to competently survey for hazel dormice. The Institute aims to drive up standards in the ecological profession.

This document does not provide guidance on the techniques to be employed in carrying out survey activities: references to published sources of guidance on survey methods are listed in section 5.

2. Status

The hazel (or common) dormouse declined both in terms of population and distribution during the 20th century, largely due to loss and fragmentation of woodland habitat as a result of forestry, urbanisation and agriculture. The UK population was estimated to be 45,000 individuals in 2005, and is still thought to be declining (Battersby 2005). Distributed primarily in southern England and Wales, the dormouse is absent from Scotland, Northern Ireland and the Republic of Ireland.

3. Legislation and Licensing

Legislation

Hazel dormice are protected under the following legislation. This outline of legislation is not comprehensive and the appropriate legislation should always be consulted for a definitive list of offences.

COUNTRY	LEGISLATION GIVING PROTECTION	SCHEDULE OR ANNEX LISTING
<i>England</i>	Conservation of Habitats and Species Regulations 2010 Wildlife and Countryside Act 1981 (as amended)	Schedule 2 Schedules 5 & 6
<i>Wales</i>	Conservation of Habitats and Species Regulations 2010 Wildlife and Countryside Act 1981 (as amended)	Schedule 2 Schedules 5 & 6

Licensing

The following Statutory Nature Conservation Organisations (SNCOs) are responsible for issuing survey licences to permit actions that would otherwise be illegal under the relevant legislation:

COUNTRY	SNCO
<i>England</i>	Natural England
<i>Wales</i>	Natural Resources Wales

A licence is required:

- for checking nest tubes or nest boxes; or
- for searching for nests where there is a risk of disturbing an occupied nest (by moving vegetation for example).

Additional licences or endorsements to standard licences are needed when marking dormice in any way (e.g. fur clipping or PIT tagging) or when collecting hair samples from live dormice for DNA analysis.

A licence is not required:

- for habitat appraisal or any method of surveying where dormice are not handled and their nests are not likely to be disturbed (e.g. nut searches);
- for installing nest tubes or nest boxes; or
- for searching for nests where there is no risk of disturbing them (e.g. visual-only searches for nests in locations already subject to disturbance, such as road verges).

In the event that a dormouse is encountered e.g. when installing nest boxes, an unlicensed surveyor must cease work, unless they are in the presence of a surveyor with an appropriate licence.

It is the role of the appropriate licensing authority to define the criteria for issuing such licences as may be required for survey work, therefore, attainment of the skills set out is no guarantee that a licence will be obtained; other criteria will need to be considered.

4. Knowledge, Skills and Experience

To independently and competently undertake survey involving dormice, an individual would be expected to possess all of the following knowledge, skills and experience.

A surveyor needs to recognise their level of attainment along a continuum. Those without the breadth and depth of the knowledge, skills and experience that CIEEM consider a minimum, should always work with, or seek advice from, an adequately experienced individual.

Knowledge

Individuals should have a knowledge and understanding of:

- conservation status;
- distribution;
- threats to populations, species range and species survival;
- dormouse ecology, breeding biology and behaviour;
- known ecological requirements (including recent discoveries on the wide range of habitats that dormice can occupy);
- legal protection;
- licensing and permissions;
- appropriate survey seasons;
- current relevant guidance on survey methods and standards;
- main survey methods used to survey for dormice (nest tubes, nest boxes, nut searches, searching for other field signs) and the strengths, weaknesses and limitations of these methods;
- range of factors that might lead to bias in the survey results, and false negatives;
- sources of information on known occurrence and distribution of dormice (including NBN Gateway, local biological/environmental records and local contacts/mammal groups);
- metadata standards / data sharing; and
- health and safety issues commonly associated with surveying for dormice.

Skills

Individuals should have skills and experience involving:

- identify dormice;
- identify field signs of dormice;
- assess habitat potential for dormice;
- carry out appropriate spatial scoping of fieldwork;
- plan and implement sound scientific surveys at an appropriate scale;
- use common survey methods for dormice;
- interpret survey results to infer the likely extent and status of dormouse populations; and
- take appropriate health and safety precautions.

If using nest or tube surveys, individuals should also be able to:

- handle and sex dormice.

Practical Experience

Whilst some of the knowledge and skills set out in this guidance can effectively be gained from personal study, vocational training and structured education, applicants for dormouse survey licences would also normally be expected to have gained practical experience, under the direct supervision of a person licensed to handle dormice, through:

- attending appropriate training courses, or receiving an equivalent level of training from an existing licensee (such as through employers' in-house training programmes);
- field work experience, demonstrated by a log book of visits on at least 10 separate occasions to check nest boxes or tubes. This should include visits to at least three different sites (to demonstrate the ecologist understands the variation in habitats used by dormice); and
- handling a minimum of five dormice in varying life stages (if planning to handle dormice).

5. Reading

Battersby J (2005) *UK Mammals: Species Status and Population Trends. First Report by the Tracking Mammals Partnership*. JNCC, Peterborough.

Bright PW and Morris PA (1989) *A practical guide to dormouse conservation*. The Mammal Society.

Bright PW, Morris PA and Mitchell-Jones A (2006) *Dormouse Conservation Handbook 2nd Edition*. English Nature, Peterborough.

Bright PW, Mitchell P and Morris PA (1994) Dormouse distribution: survey techniques, insular ecology and selection of sites for conservation. *Journal of Applied Ecology* **31**: 329-339.

Bright P and Morris P (2005) *The Dormouse*. The Mammal Society.

Chanin P and Woods M (2003) *Surveying dormice using nest tubes: Results and experiences from the South West Dormouse Project*. English Nature Research Report No. 524.

Eden S (2009) *Living with Dormice*. Papadakis, United Kingdom.

6. Acknowledgements

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