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endangered  
species



## **Train the trainers**

**Guidelines for the National Dormouse Monitoring Programme**

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## Introduction

Hazel dormice are small, arboreal rodents that live at low densities even in good habitats – of which the key features are arboreal connectivity and shrub diversity.

Over the past century their range has reduced from all of England and Wales to approximately southern England and Wales and the England/welsh border. Populations continue to decline due to habitat fragmentation and inappropriate woodland and hedgerow management.

Dormice are a European Protected Species and it is illegal to disturb them or destroy their habitat without a licence from Natural England (NE) or Natural Resources Wales (NRW).

Dormouse conservation in Britain is led by People's Trust for Endangered Species (PTES), NE and NRW and implemented through both the voluntary and professional sectors. The key elements are:

- The National Dormouse Monitoring Programme
- The Dormouse reintroduction programme
- Dormouse survey and monitoring
- Dormouse mitigation

This guide aims to help trainers appreciate the information and experience that trainees should have before they can become licensed.

Throughout this booklet, 'You' refers to the trainer or the person potentially providing the reference; 'They' refers to the trainee or the person wishing to obtain a dormouse licence

### Don't forget...

When you provide a reference for someone to obtain a licence, not only are you saying that they are suitable to carry out a dormouse check for the NDMP or undertaking dormouse surveys; you are also saying that they are suitable to train other people.

Although persons with dormouse licences can train others, they cannot supply a reference until they have been licenced for at least two years for the activities they are providing a reference for.

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## The National Dormouse Monitoring Programme (NDMP)

### What is the NDMP?

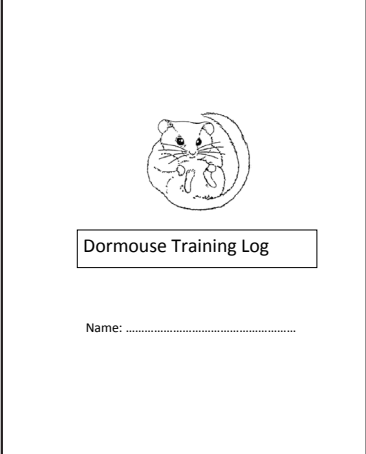
The National Dormouse Monitoring Programme, data from which is used to assess the dormouse population trend in the UK

### Do they know the requirements for setting up a site?

- 50 boxes in a site with dormice, sited in a grid approximately 20m apart.
- Check a minimum of twice a year in May/Jun and Sep/Oct between 15th and 25th of the month.
- Record number of dormice and basic biometric data and submit results annually to PTES.

### Do they know about the Dormouse Training Log and where to obtain a copy?

PTES, along with NE and NRW and local groups have been seeking to improve the level of dormouse training. To this end a Dormouse Training log has been developed which should be completed by the applicant to see how well they are progressing to achieve their personal objectives and as a document to submit to NE or NRW. It is available on the PTES website



The form features a circular illustration of a dormouse at the top center. Below the illustration is a rectangular box containing the text "Dormouse Training Log". Underneath this box is a line for the name, labeled "Name: ....."

## Dormouse ecology and theory

### Have they attended a training course?

If they have – which one; and any comments on it.

If not encourage them to go on one as they are an excellent way to ensure all trainees have a basic understanding of dormouse ecology and their conservation.

|               | Activity   | Signature | Date |
|---------------|--|-----------|------|
| One signature | Dormouse ecology and conservation theory:<br>Attend theory training session <sup>1</sup> |           |      |

Attendance at a training course is a good starting point but it will certainly not give them all the experience they will need for a licence.

### Which organisations provide training?

- PTES (key conservation charity on dormice)
- FSC
- CIEEM
- Mammal Society
- County Groups
- Wildlife Trusts
- Independents.

There is no standard course although PTES may provide some course materials.

### What was covered in the training course?

At the very least should be: Dormouse ecology, dormouse conservation (possibly survey), legislation and introduction to habitat which may be done in the field. If consultants will need to do more work on habitat.

### Was it made clear where they could get further help?

- Training videos and resources on website
- Dormouse forum
- Dormouse Monitor

# The Dormouse Training Log cont'd

## Dormouse survey techniques

### Are they aware of different survey techniques?

- Nut hunt methodology
- Use of nest tubes
- Use and limitations of hair tubes and nest searches

### Are they aware of requirements of NE tube survey and how to establish dormouse presence/absence?

Methodology in Dormouse Handbook and guidelines from NE

### Can they put up nest tubes?

As far as possible these should be sited in the most suitable dormouse habitat (which is frequently the least accessible) and hung near to horizontal with slots in the tube at the bottom to allow water to drain out.

### How do they check them?

Visual; sponge in entrance

### Difference between nest tube use and nest box use?

Nest tubes for survey; nest box for monitoring. If tubes are put up at a site make sure there is a plan to take them out.

### Have they had practical experience of putting up boxes?

What method have they found works best? Bungee cord, wire, wire loop on box?

## Dormouse habitat management

### Range of habitats occupied by dormice

Dormice can occur in any woody or scrub habitat within their range. Usually old managed/unmanaged coppice wood but any wood with good understory or scrub but also conifer, gardens etc.

### Key habitat features

- Arboreal connectivity
- Shrub diversity

### Habitat obstacles to dormouse occupation

- Lack of understory
- Lack of arboreal connectivity
- Limited shrub species diversity
- Habitat fragmentation

### Notes on survey techniques

This will be more relevant for consultants than conservation volunteers – but they can become consultants too.

|                |  |  |  |
|----------------|--|--|--|
| One signature  | <b>Dormouse Survey techniques</b><br>Attend theory training session <sup>1</sup>                               |  |  |
| Two signatures | <b>Dormouse Survey techniques</b><br>Practical experience<br>(Site and/or replace nest boxes. Site nest tubes) |  |  |
|                |  |  |  |

### Notes on dormouse habitat management

This will be more relevant for consultants that conservation volunteers – but any drivers for woodland management are useful.

|               | Activity  | Signature | Date |
|---------------|---|-----------|------|
| One signature | <b>Dormouse Habitat Management</b> (if applicable) <sup>2</sup><br>Attend theory training session |           |      |
| One signature | <b>Hazelnuts:</b><br>Identify nuts opened by dormice, wood mice and bank voles and others         |           |      |
| One signature | <b>Nests:</b><br>Recognise typical dormouse nest, wood mouse nest, and bird nest                  |           |      |



## The Dormouse Training Log cont'd

### Woodland management ideas

- Managing woodland edge/rides
- Dead hedging
- Protection from deer
- Cut small coppice coupes
- Maintain/create arboreal linkage
- Plant/layer hazel to increase stool density in cut coupes

### Mitigation proposals

- Long term management
- Landscape linkage via hedgerows/linear woodlands
- Increase shrub species diversity

### Enhancement proposals

- Erection of dormouse boxes
- Woodland and hedgerow management

### Further information

Further information: PTES website and visit optimal sites e.g. Briddlesford on the Isle of Wight, Bradfields Suffolk.

## Hazelnuts

### Harder than it would appear

On training courses this can take up to 40 minutes for people to get their 'eye in'.

### Can they do it? – worth checking

### Importance as a survey technique

Do they know how nut searches may be used as a presence/absence method i.e. 20 minutes at 5 fruiting hazels or 100 nuts opened by woodmice, bankvole or dormice.



# The Dormouse Training Log cont'd

## Nests

### How do they identify a dormouse nest?

Woven structure; green leaves or both

### Are they aware of the range of nests dormice make?

Nests can be made of almost any local material making it hard to identify some nests with any certainty. Nests in boxes can be different to natural nests or those made in tubes

### Can they identify other nests?

Woodmice, wren's and tits most likely but also need to be able to identify harvest mouse nests when searching in hedgerows.

### What's the story?

Can they interpret possible nest box use or know when to say it can't be done?

### When to record dormice?

This may be different for conservationist and consultants.

Conservationists need to be absolutely sure it is a dormouse nest before recording it as such to ensure we maintain accurate data on dormouse range.

Consultants should identify possible dormouse nests either to promote further surveys or to promote sympathetic habitat management.

## Dormouse handling (demonstrate how to approach a nest and check for occupancy)

### Stay quiet and tell others

Make sure they ask for quiet and ask others to do so. They should not talk at an unbunged box as any animals present may escape.

### Watch so if any escape they can be counted and aged

Escapes are inevitable but they should be minimised as much as possible with a careful approach. If there are escapes, basic information such as number and age class of the animals can still be obtained.

### Putting the box in a large bag to check contents

- Do they clear their working area?
- Do they ask for help if needed?

### Maintain the integrity of any dormouse nests found

Dormice spend a while making their nests; we shouldn't destroy them. As far as possible we should leave the box as we find it.

### Notes on handling

Competency in all handling stages should be witnessed by the two referees.

They need to handle dormice confidently and competently and without supervision in the final stages of their training.

Finding young in a nest is one of the harder stages to deal with. To disturb or not to disturb...?

|                |   |  |  |
|----------------|---|--|--|
| Two signatures | <b>Handling:</b><br>Identify dormouse age classes and demonstrate appropriate handling techniques for all ages and conditions including active juveniles and torpid individuals |  |  |
|                |   |  |  |

|                |  |  |  |
|----------------|--|--|--|
| Two signatures | <b>Handling:</b><br>Demonstrate how to approach a nest box and check for occupancy |  |  |
|                |  |  |  |

# The Dormouse Training Log cont'd

## Dormouse handling – demonstrate how to get a dormouse carefully out of a box including when there is more than one animal present

They need to be able to deal with:

### Torpid dormice

Record nest, number, age and if possible weight and sex

|                |  |  |  |
|----------------|--|--|--|
| Two signatures | Handling:  |  |  |
|                | Demonstrate how to accurately weigh individual dormice |  |  |

### Single active animals

Record nest, number, age, weight, sex and breeding condition

|                |   |  |  |
|----------------|---|--|--|
| Two signatures | Handling:   |  |  |
|                | Demonstrate how to return a dormouse to a nest box, including when there are more than one dormouse present |  |  |

### Multiple active mature animals

Record nest, number, age, weights, sexes and breeding condition

### Young animals

Record nest, total or minimum number present, age and if possible weight

## Dormouse handling – Demonstrate knowledge and handling of all ages and conditions

Are they familiar with the age classes in the NDMP?

- Pinks
- Grey eyes closed (GEC)  
Approx. 6 – 16 days old, 2.5 - 6g
- Juvenile (pre hibernation)  
Approx. 28+ days old, 10g +



© Ann Weddle



© Clare Pengelly

- Eyes open (EO)  
Approx. 16 – 28 days old, 6 - 10g

- Adult (post hibernation)  
Approx. 8-12mths +, 12g +



© Nora Wuttke



© Ian White



## The Dormouse Training Log cont'd

### Handling cont'd

NB The age class is important as dormice cannot be aged by weight

For the NDMP dormice are either:

- YOUNG i.e. unweaned young of year or
- MATURE i.e. weaned animals.

**YOUNG** should be recorded as either:

- Pink
- Grey Eyes Closed
- Eyes Open

**MATURE** should be recorded as either

- Juvenile (weaned young of year)
- Adult (animals that have gone through a hibernation)

|                |   |  |  |
|----------------|---|--|--|
| Two signatures | Sex determination:  |  |  |
|                | Demonstrate knowledge and handling experience needed to accurately identify sex of dormice and breeding condition |  |  |

### Dormouse handling – Demonstrate how to accurately weigh individual dormice

**What weighing scales do they use?**

60g pesola type are recommended

**Tagging bags is helpful**

Securing the weigh bag with a wire tag will prevent accidental escapes

**Keep hand under bag to reduce possibility of accidents**





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## The Dormouse Training Log cont'd

### Handling cont'd

**Dormouse handling – Demonstrate how to return a dormouse to a nest box including when there are more than one present.**

**This should be done in an controlled and organised manner**

It is important that dormice are returned in a controlled manner. It is useful to let people get a 'feel' of dormice in the hand before putting them back)

**It is very important that mothers are returned to litters and do not escape**

Consider the order in which the dormice are returned (i.e. young before Mum)

### Sex determination

**They should demonstrate a suitable handling technique and be competent with sexing**

They should be able to hold dormice securely for sexing and be able to distinguish between the sexes. It can be very difficult to sex dormice weighing less than 8g and it is advised that YOUNG animals are not sexed.



## The Dormouse Training Log cont'd

### Record keeping

Persons training for a dormouse licence should get experience of filling in forms in the field although it is the licensed persons responsibility to make sure that the forms are filled in correctly and accurately.

It is the licenced persons responsibility to make sure that the forms are filled in correctly

|               |  |  |  |
|---------------|--|--|--|
| One signature | Record keeping:<br>Demonstrate how to fill in all the recording forms in use by the National Dormouse Monitoring Programme |  |  |
|---------------|--|--|--|

Recording data is not always as good as it should be – a positive answer needs to be given in the field e.g. M? is not helpful to whoever is entering data. If anything is undetermined; say so.

### Opportunities on a NDMP check

- All can approach and check dormouse boxes
- **ET/ST** check nest
- **ET** catch dormice so biometric data is collected
- **NT/ST** can repeat
- **Any** can return to box unless breeding female present

#### Levels of trainee

|           |                     |
|-----------|---------------------|
| <b>ET</b> | Experienced trainee |
| <b>ST</b> | Semi-exp. trainee   |
| <b>NT</b> | New trainee         |

The most important things on an NDMP check are the welfare of the animals and the collection of the data. Hence a competent person should undertake those parts of the check dealing with this.

With single dormice it may be possible to repeat the exercise to give a training opportunity to a less experienced person. Returning dormice to the box can be a good way to give people their first opportunity of handling dormice.

### Why do we collect the data?

#### Dormouse numbers

The national dormouse trend is determined from the number of dormice recorded

#### Sex

Ongoing confirmation of sex ratio can aid the dormouse reintroduction programme; weights between sexes vary by month so temporal and geographical data can be compared

#### Weight

This can indicate the animals age class for YOUNG and MATURE but will not distinguish between Juvenile and Adult.

#### Activity

Comparing the % of active or torpid animals with the long term average can give an indication of winter/spring condition by year and by region

#### Breeding condition

Indication of fertility so temporal and geographical data can be compared

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### Age class

It is important to give an accurate age as breeding rates are an important metric with regard dormouse population success

### Comment

At present unusual conditions are noted in the comments i.e. tail tip colour.

## Nest box hygiene

We recommend:

- Clear boxes of all material over the winter months unless dormice are present
- Then clear boxes only of damp, smelly, infested or rotting nest material and any dead animals
- Remove all terrestrial mammals from boxes except if young are present
- Use separate bags for each monitoring site
- Clean dormouse tubes at end of season in mild detergent if moved between sites

## Site hygiene

- Keep tools/bags dedicated for use in one site or wash/disinfect between sites
- Use disinfectant hand gel after handling each rodent in a box
- Disinfect boots between sites (we suggest Cleankill sanitising spray)

## Further advice

- Dormouse Training Log
- Presentation and notes on Checking Dormouse Boxes
- Presentation on Sexing dormice
- Short videos on how to undertake an NDMP check
- Dormouse Conservation Handbook

**All available at [www.ptes.org](http://www.ptes.org)**