



12 Common Dormouse species action plan

12.1 Introduction

The Common Dormouse *Muscardinus avellanarius* can easily be recognised by its small size, bright golden-brown colour, large eyes and bushy tail. It is a woodland species with rather specialised feeding requirements and is found in deciduous woodland and hedgerows. It feeds on flowers, pollen, fruits, insects and ripe nuts such as Hazel.

Dormice are strictly nocturnal and spend the summer nights foraging for food, often high in the treetops. Many of these foods are only present for a few weeks a year, so Dormice have to have a wide range of suitable foods available within a small area. During the day Dormice occupy nests, which may be woven out of grass stems or honeysuckle bark and are often situated within a few feet of the ground. They also use old birds nests or tree cavities and are readily attracted to special nesting-boxes.

Perhaps the Dormouse is best known for its habit of hibernating for up to seven months of the year. As the weather turns colder in October, the animals will seek out a suitable place at ground level, curl up in a ball, go to sleep and not emerge until the following April or May. Even in mid-summer they may enter a torpid state (with lowered temperature and slower movement) during periods of food shortage or bad weather.

Dormice live at low population densities, but can live up to five years in the wild, much longer than is normal for other small mammals. They have few predators:

owls take Dormice occasionally, so might Weasels, but no predator kills significant numbers regularly.

12.2 Current status

The Dormouse is found in lowland England and Wales but does not occur in Scotland or Northern Ireland. In Wales, there are few known populations and in England it has become extinct in up to seven counties in the past 100 years. It is absent from the north, except for small populations in Cumbria and Northumberland, and are patchily distributed in southern counties. Population densities everywhere are less than 10 adults per hectare.

The distribution of the Dormouse in Hertfordshire is probably limited by the fragmented nature of appropriate habitat such as ancient coppiced woodland. All records are lodged at the Hertfordshire Biological Records Centre. Pre-1985 records show concentrations in woodlands around Stevenage in central/north Hertfordshire, the Broxbourne/Northaw Great Wood complex in the south-east and Ashridge in the extreme west. Other scattered sites include Bricket Wood/London Colney, Bramfield/Tewin Woods, Brocket Park and in the north-east Scales Park. This distribution shows most association with major areas of woodland rather than woodland type, though no structured survey has been undertaken.

The jointly run survey by The Wildlife Trust and the Herts Mammal Group that began in 1993 suggests that Dormice may now have declined. Current records show populations around Stevenage, Ashridge, Breachwood Green, Scales Park and Broxbourne Woods. There are also a few scattered sites outside this. However, the survey effort to date has not been great enough to determine to what extent Dormice have declined in the county or whether their distribution has reduced.

The Dormouse is listed on Appendix 3 of the Bonn Convention and Annex IVa of the EC Habitats Directive. It is protected under Schedule 2 of the Conservation Regulations, 1994 and Schedule 5 of the Wildlife and Countryside Act 1981. The Act and Regulations make it illegal to:

- intentionally or deliberately kill, injure or capture Dormice
- deliberately disturb Dormice (whether in nest or not)
- damage or destroy Dormouse breeding sites or resting places
- possess or transport a Dormouse or any part of a Dormouse, unless acquired legally
- sell, barter or exchange Dormice, or parts of Dormice.

12.3 Current factors causing loss or decline

12.3.1 Loss of habitat

There has been a 44% loss of ancient semi-natural woodland in Hertfordshire over the last 50 years, which when suitably managed provides optimum habitat for the Dormouse. Loss of overgrown hedgerows also removes habitat and removes corridors between otherwise isolated woodland areas.

12.3.2 Decline in woodland management

The sharp decline in coppicing this century has led to a senile shrub layer and heavy shading by taller trees, reducing habitat suitability.

12.3.3 Inappropriate woodland management

Large-scale coppicing renders extensive areas unusable for up to five years by creating open ground which the animals are reluctant to cross. Depending on the pattern of felling coupes, on small sites this can act as a barrier to Dormice reaching potentially important food resources. This can put pressure on individuals and reduce a population to vulnerable levels. On larger sites where sufficient quality habitat remains this is not such a problem.

Too short a rotation coppice (e.g. 10-12 years) may not allow Hazel to grow old enough to produce much food, but left longer Hazel gets shaded out. As long as there is a wide range of coppice within a wood, suitable habitat will be present. This is only likely to occur in well managed coppice.

Plantation forestry produces areas of low species diversity, with little understorey under tall, upright trees.

This results in unsuitable habitat except where there are shrubby areas at the margins.

Even where there are shrubby margins, lack of management of these, particularly on favoured sunny south and west sides, may result in the loss of the ideal dense tangled conditions as the shrubs grow taller.

12.3.4 Fragmentation and isolation of remaining habitat

Isolated populations are very vulnerable due to their low reproductive potential and limited powers of dispersal. This reduces the chance of immigrants reinforcing existing populations or colonising suitable empty habitats leading to local extinctions.

Retention and management of hedgerows, as links between woodlands and suitable habitat in their own right, is a key factor in maintaining local populations.

12.3.5 Climatic factors

The Dormouse is at the limit of its range in Britain. Variations in length of seasons for both activity and hibernation, low summer temperatures and heavy rain all play havoc with hibernation, breeding, and feeding strategies better suited to the more predictable continental climate of warm dry summers and cold dry winters.

12.3.6 Grazing animals

The presence of too many deer in a wood suppresses regeneration and severely damages the vital shrub understorey that provides so much of the food resources needed by Dormice.

12.3.7 Other threats

There is no evidence of significant illegal persecution or collecting. There are no predators which regularly take Dormice. Road deaths appear to be infrequent and there is no sign of epizootic disease. Warfarin, put out to control squirrels, may be a danger locally. It is also thought that competition with grey squirrels for food may be an important issue.

12.4 Current action

In 1992 the Dormouse was added to English Nature's Species Recovery Programme. Funding from this allowed the Herts & Middlesex Wildlife Trust to set up the Hertfordshire Dormouse Project. This later became a joint Wildlife Trust and Herts Mammal Group project. The aim is to establish a clear idea of the status of the Common Dormouse in the county and to develop a strategy for their survival. Following several years of survey work a nestbox scheme has been established in a selection of woods known to contain Dormice, aimed at monitoring the dynamics of these populations.

A public participation exercise (the 'Great Nut Hunt') – to encourage people to hunt for signs of Dormice in their local area – began in 1996 to increase awareness and to improve knowledge of Dormouse distribution. The Herts Mammal Group helped promote this locally.

Ecological research at a national level, has led to practical proposals for conservation management. In 1996 English Nature published 'The Dormouse Conservation Handbook'

12.5 Common Dormouse Action Plan (Draft)**Objectives, actions and targets**

Objective 1: To update our knowledge of Dormouse distribution in Hertfordshire

Target: Set up a countywide survey programme by 2007

Action code	Action	Target start date	Target end date	Lead partner	Other partners
D/A/1.1	Collate all current survey information and map onto GIS	2003	2004	HBRC	HMWT, HMG, County Mammal Recorder
D/A/1.2	Produce a historical and recent distribution map	2003	2004	HBRC	
D/A/1.3	Re-develop survey methodology and distribute to surveyors	2004	2004	HBRC	
D/A/1.4	Survey existing sites with recent records to verify continued presence	2004	2005	HMG	CMS, HMWT, NT, LA's, HBRC, volunteers
D/A/1.5	Survey historic sites to verify continued presence	2005	2006	HMG	CMS, HMWT, NT, LA's, HBRC, volunteers
D/A/1.6	Survey suitable areas where there are no known records for Dormice	2006	2007	HMG	CMS, HMWT, NT, LA's, HBRC, volunteers

Objective 2: To gain a better understanding of habitat usage by Dormice in the County

Target: Produce detailed study report by 2008

Action code	Action	Target start date	Target end date	Lead partner	Other partners
D/A/2.1	Develop a project proposal for a detailed site specific habitat usage study	2006	2007	HMG	
D/A/2.2	Carry out Dormouse habitat study	2006	2008	HMG	
D/A/2.3	Produce report and disseminate results	2007	2008	HMG	
D/A/2.4	Continue to monitor existing populations	2006	Annually	HMG	

Objective 3: To maintain and enhance the current county population

Target: Secure appropriate habitat management on all existing sites and surrounding areas by 2008

Action code	Action	Target start date	Target end date	Lead partner	Other partners
D/A/3.1	Ensure Dormouse Wildlife Sites are protected in local plans and through the development control process		As reviewed	HBRC	LA's
D/A/3.2	Identify and contact landowners of existing sites to provide habitat management advice	2005	2007	WSP	HMG
D/A/3.3	Secure appropriate habitat management on existing sites	2005	2008	CMS	HMG, LA's, HMWT

Objective 4: To raise awareness of the conservation needs of the Dormouse to key target audiences, such as woodland owners/managers, mammal enthusiasts and the general public

Target: Establish a demonstration site by 2008 and establish annual training visits

Action code	Action	Target start date	Target end date	Lead partner	Other partners
D/A/4.1	Hold a survey techniques training day	2004	2004	HMG	HMWT
D/A/4.2	Co-ordinate public participation in the national 'Great Nut Hunt'		Annually	HMWT	
D/A/4.3	Establish a Dormouse conservation demonstration site	2004	2008	HMG	
D/A/4.4	Organise training visits to demonstration site for woodland practitioners	2008	Annually	HMG	

Relevant Action Plans:

Hertfordshire Plans

Woodland; Farmland

National Plans

Dormouse; Ancient and/or species-rich hedgerows; Broadleaved, mixed and yew woodland Habitat Statement

Abbreviations (Partners)

CMS – Countryside Management Service

HBRC – Hertfordshire Biological Records Centre

HMG – Herts Mammal Group

HMWT – Herts & Middlesex Wildlife Trust

LA's – Local Authorities

NT – National Trust

WSP – Wildlife Sites Partnership (HMWT, HBRC, CMS, FWAG, EA, EN, DEFRA, Chilterns AONB)

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