Dormouse (Muscardinus avellanarius)

Dormice are closely associated with ancient semi-natural woodlands, although they also occur in scrub and ancient hedges. They are largely confined to southern England and the Welsh borders, with isolated records from Wales and eastern England. In Suffolk, they are found mostly in the south of the county.



1 Definition

The Dormouse is a nocturnal animal which lives and feeds within the shrub and tree layer of woodlands and hedgerows. Because they rarely descend to the ground, except to hibernate, they require good arboreal connectivity. Their diet includes flowers, insects, fruit and nuts with hazel, oak, bramble and honeysuckle being particularly valuable food sources, but they will feed on and within a wide range of other tree and shrub species. The characteristic way that dormice open hazel nuts has long been used as a survey tool to determine their presence in woodland.

Food availability alters with the seasons, so not only does the dormice rely on a sequence of suitable arboreal foods from May until October, it also requires this diversity to be available within a very small area, as it rarely travels 100 meters from its nest in a night. Dormice therefore have very specific habitat requirements, which can be characterised in terms of its structure and diversity.

Dormice construct woven nests in bushes and shrubs and also use hollow tree branches and old birds nests. An average of four young are usually born between July and August and in most years a female will successfully raise only one litter. Second litters are rarely born before late August and there is often insufficient time for the young animals to reach a critical body weight prior to hibernation. Reproductive success is also influenced by climatic factors, particularly cold and wet weather in spring, which can delay the start of the breeding season or result in the deaths of early born young.

Dormice are unusual amongst other small mammals in that they are relatively long lived and a female can be expected to have up to three breeding seasons. The impacts of predation and disease are also thought to be at low levels. However, Dormice also occur at much lower densities than other small mammals, typically 5-8 animals per hectare. This means that populations in small, isolated woodlands are extremely vulnerable to habitat change and this can result in localised extinctions.

2 Current status

2.1 National

Dormice are thought to have disappeared from about half of their original range in 120 years and recent surveys confirm that it is now extinct from six counties. Within the southern counties they are still widespread but their distribution is patchy. Elsewhere in England and Wales populations are very localised. They are largely absent from central England and the north of England. Dormice are included with English Nature's Species Recovery Programme and there have been re-introductions to 11 sites to date. A national monitoring scheme has been set up to record data from key sites throughout England and Wales.

Research published through English Nature in 2002 showed that there has been a 64% decline of Dormouse occurrence in hedgerows since the late 1970s. This loss is of high conservation concern because Dormouse is an indicator of biological diversity and its loss is likely to reflect losses of other species also.

2.2 Local

Suffolk is on the edge of the Dormouse's range and they have never been common in the county. Ticehurst in The Victorian County Histories (1911) reported them being commonest in the area between the South of Bury St Edmunds and Long Melford, with records from the east of the County in Belstead and Bentley. Their current distribution reflects a contraction of range further south, with populations known from Assington, Polstead, Raydon and Bentley. Isolated records exist within other Parishes in the south of the County. Dormice were recorded in Bradfield Wood until the mid 1990s, but subsequent surveys have failed to record them.

Dormice were reintroduced to Priestley Wood in Barking in 2000, as part of the Species Recovery Programme and they are believed to have subsequently spread to southwards to Bonny Wood, following their discovery in this woodland in 2002 and again in 2003.

3 Current factors affecting Dormice in Suffolk

- Decline of coppicing in ancient woodlands leading to loss of structural and species diversity within woods and therefore loss of food sources.
- Isolation of small woodlands resulting in highly vulnerable relic populations
- Intensive management of existing hedgerows rendering them unsuitable as permanent habitat or as dispersal corridors.

4 Current Action

4.1 Legal Status

Dormice are listed on Schedule 5 of the Wildlife & Countryside Act 1981 (as amended, 1988) and Schedule IV of the Conservation (Natural Habitats &c.) Regulations 1994 (which also implements the Berne Convention 1979, where dormouse is listed in Appendix III).

4.2 Management, research and guidance

Since 1998, Suffolk Wildlife Trust has been undertaking surveys of ancient woodlands within the dormouse's historical range. This is to confirm that Dormice are still present at those sites recorded by Roughton in 1988, but also to discover new sites where they had previously been overlooked. Although there are 23 sites in Suffolk where dormice have been recorded since 1999, many of these are isolated and vulnerable and in at least two cases, further monitoring in 2002 failed to record their presence.

A nesting tube, devised by researchers at Royal Holloway College has been highly effective in recording Dormice, particularly in the absence of fruiting hazel. These tubes were first used in Suffolk in 2001 and are now employed as the standard survey technique in both woodlands and hedgerows. This lightweight design enables them to be placed on relatively small branches, which is particularly useful for hedgerow survey work. In addition, work at Tiger Hill Local Nature Reserve has shown that, compared with heavier nest boxes, they are preferentially used by Dormice. In order to comply with the legislation, an English Nature licence holder must check the tubes. In 2003 there are about 12 sites where this method is employed, but because it is a survey technique numbers vary every year. There are currently five sites with nest boxes but in 2002 only one site had occupied boxes.

Since 2002 there has been an additional focus on surveying Dormice in hedgerows and highlighting their presence and habitat needs to landowners. FWAG have been given guidance on parishes which have or may have Dormice and also training on recognising hedgerows for Dormice. Future work should also concentrate on identifying areas where reinstatement of hedgerows or less intensive hedgerow management would be desirable to improve connectivity between Dormouse sites.

Two sites in Suffolk (Tiger Hill and Priestley Wood) contribute to the National Dormouse Monitoring Scheme.

5 Action Plan Objectives and Targets

- 1 Continue to identify sites where dormice occur
- 2 Maintain and enhance dormouse populations at these sites
- 3 Wherever possible link dormouse populations to reduce chances of local extinctions

6 Dormouse: Proposed action with lead agencies

Action	Date	Partners
POLICY AND LEGISLATION		
Ensure protection of hedgerows in areas where Dormice occur by ensuring Local Authority Planning Departments are aware of WCA (1981), Conservation (Natural Habitats &c) Regulations (1994) and Hedgerow Regulations (1999).		Babergh DC, SCDC, SWT, EN, SCC
Ensure Dormouse sites are designated as County Wildlife Sites.	2004 2005 2006 2007	LAs, SWT, SCC
SITE SAFEGUARD AND MANAGEMENT		
Promote appropriate management of woodlands and hedgerows to maintain current populations and prevent further habitat fragmentation. Liaise with five land owners per year.	2005	SWT, FE, Babergh DC, SCDC, DV&SVP
Ensure appropriate management practices are incorporated into agri-environment schemes in areas where Dormice may occur		DEFRA, FWAG
Ensure that all bodies responsible for woodland management work are aware of the presence of Dormice before undertaking work. Distribute information sheet to all woodland contractors used by SBAP partners.	2005	SWT, AWP, FA, Babergh DC, SCDC
Reinstate hedgerows to link Dormouse populations – aim for one hedgerow per year.	2004 2005 2006 2007	DEFRA, FWAG, SCC, SWT, FA, DV&SVP

SPECIES MANAGEMENT AND PPROTECTION		
Support future applications for reintroduction into suitable sites. Aim for one suitable site by 2007 if outcome of survey work is favourable.		EN, SWT, FA
RESEARCH AND MONITORING		
Continue National Dormouse Monitoring scheme at Tiger Hill and Priestley Wood by undertaking twice-yearly monitoring	2005 2006 2007	SWT
Continue survey work in woodland and hedgerows to determine extent of Dormouse distribution and degree of habitat fragmentation.	2004 2005 2006 2007	SWT, FC
ADVISORY		
Liase with landowners and land managers of Dormouse sites to ensure appropriate management and also neighbouring landowners in parishes where Dormice occur. Distribute relevant literature.	2005	SWT, FWAG, FC, DV&SVP
COMMUNICATIONS AND PUBLICITY		
Produce guidance leaflet on habitat management for Dormice in Suffolk	2004	SWT
Publicise Dormouse and its habitat requirements by using local media. Aim for one article/press release in regional newspapers or farming press per year		SWT, FWAG
Involve public in identifying potential hedgerows within current Dormouse range for follow-up surveys by undertaking one workshop per year.	2004 2005 2006 2007	SWT