

Wildlife Profiles: Hazel Dormouse

By Henry Stanier

What?

Naturally rare, the Hazel or Common dormouse (*Muscardinus avellanarius*), is unlike other rodents, being long-lived and highly specialised in its ability to hibernate. It has a variety of names; French names include muscardin, croquenoix and rat-d'or; sleep-meece in Suffolk but whatever it is called it is a popular species of small mammal with the public. Its bright golden colour, thick furry tail, big black eyes make it very attractive.

The dormouse has a head-body of 6–9cm. It is the only small mammal in the UK with a furry tail, 5.5–8cm in length. It weighs between 15–30g and is unusually long-lived, with a lifespan of up to 5 years.

The diet of dormice is an interesting one, with flowers, particularly the pollen, being important. Bramble is a significant species, or group of species in wildlife conservation, providing pollen in the spring and berries in the autumn, and dormice feed on both. Fruits, hazelnuts, beech mast and sweet chestnuts, as well as aphids and other small insects are also eaten. Hazel, honeysuckle, bramble and oak are probably the most important food sources.

Their predators include cats, owls and weasels but food availability is one of the most important factors in their survival, especially when trying to survive the winter, a time when they can be easily disturbed as they hibernate on the woodland floor, at the surface.

Where?

The Hazel Dormouse is a species of scrub and woodland understorey (the lower growing trees and shrubs found in such places). These features are often present in the early stages of the creation of woodland and so for them to be present in the countryside as a whole requires management which would encourage regeneration.

Dormice can live at a density of up to 10 per hectare but local conditions including availability of resources such as food, can result in lower densities. These figures are still low compared with other small mammals. They are thought to prefer mixed hazel coppice woodland which provides a varied diet throughout the year. However dormice are also found in other scrub and hedgerow habitats, and even conifer plantations and, as with other species become less specialised away from the edges of their range, which in England has its northern limit from Shropshire to Northamptonshire. Hazel Dormice used to be more widespread in the UK but they are now rare and vulnerable to extinction in this country. They are found mainly in the southern counties of England and Wales, with scattered, small populations in the north, and none in Scotland.

When?

Dormice are nocturnal, alternating bursts of activity with periods of rest. Breeding males live alone, whilst females and non-breeding males are often found nesting together outside the breeding season, and sometimes the same male and female will live together in successive years.

Dormice are mainly arboreal in the summer, with evidence showing that they forage higher up in the canopy in the spring and then move down to lower levels as the year progresses.

In July or August and sometimes earlier, the babies are born, naked and blind. Dormice usually have one litter a year of up to eight or more young but the average is half that. They remain with their mother in her nest for up to about six weeks, longer than most small rodents. They must weigh 12-15g before hibernating for the first time; otherwise their



Photo by Henry Stanier

chances of surviving the winter are poor.

Dormice, uniquely amongst our smaller mammals, hibernate over winter in closed woven nests just under the surface of the ground. Dormice need a stable humidity and minimise their moisture loss by nesting underground, essential to avoid becoming dehydrated.

Dormice usually go into hibernation when the first frosts arrive in October or November and are not normally active again until April or May. Adults weigh about 20g in the summer but can fatten up to 35g before hibernation. Hibernating dormice let their body temperature drop to that of their surroundings (the optimum temperature is between 1 and 4°C where the least amount of energy is consumed) and their heart and breathing rate drop by about 90%. Most people are surprised to learn that dormice hibernate on the ground and do not seem to use the nest boxes provided as part of survey and monitoring projects. While still difficult to find they are vulnerable to other animals such as pigs and dogs hunting through the leaves and earth under hedgerows and in woodland.



Young dormice exploring beyond the nest.

Why we are interested in them?

Over the last 100 years dormice have become extinct across half their range in England. The loss of ancient woodland, particularly the splitting of big woods into smaller ones and unsympathetic woodland management has all contributed to this major decline. The impact of the introduction of non-native species of deer has been to reduce the availability of important food plants and diminish the natural structural diversity of our woodlands.

In 1980's the Hazel Dormouse was given full protection under schedule 5 of the Wildlife and Countryside Act. In the late 1980s, a dormouse reintroduction project was set up involving Royal Holloway College, English Nature and the People's Trust for Endangered Species, as well as a range of partner Wildlife Trusts. Suitable release sites needed to be large and diverse ancient woodlands in counties close to the current range of the dormouse. Brampton Wood fitted these requirements and became the first in 1993. Since then, nest boxes set up in the release area have been checked on an annual basis to monitor the success of the reintroduction. In 2011 the Wildlife Trust incorporated the box checks into the monitoring programme of the Ecology Groups.



Dormice box check. Photo by Stuart Elsom

On other reserves, the question of how and when dormice colonise, is being explored as part of the wider approach to monitoring the connections within our Living Landscape. Individual Living Landscape projects target areas where it is important to reverse the trend of habitat fragmentation and enhance and maintain an ecologically viable mosaic of habitats for both wildlife and people, with nature reserves which are basically bigger, more linked up and so better.

Where can I learn more?

- Bright P. & Morris P. 2002: Putting dormice back on the map. *British Wildlife* 14: 91–100.
- Mitchell-Jones A. & White I. 2009: Using reintroductions to reclaim the lost range of the dormouse, *Muscardinus avellanarius*, in England. *Folia Zool.* – 58(3): 341–348.
- Morris P. 2011 (2nd Edition): *Dormice, a tale of two species*. Whittet Books Ltd.