

Hazel Dormouse

Muscardinus avellanarius

Hazel or common dormouse is the only native species of dormouse in Britain, measures just 6-9cm and has golden brown fur and a distinctive furry tail. As it's nocturnal, it has very large eyes. It's one of the few British mammals that hibernate, and this makes its life course something quite interesting to look into:

Getting ready to hibernate

Hibernation begins when the nights become cool in the autumn. In reaction to this, the body temperature of the dormouse drops to approach that of its surroundings, and its **heart and breathing rate often drop by 90% or more**.

The beginning of hibernation

Fat reserves gathered in the summer and autumn. Dormice **have to be 15g - 18g to enter and survive hibernation**.

Avg: 20g



Example: Nuts and berries

Autumn

They eat fruit and seeds: Hazelnuts, blackberries, sloes, sweet chestnuts, elderberries, rosehips, willow seeds, wayfaring tree, yew berries.



Example: Insects

Mid-summer

There're no flowers and the berries aren't ripe yet, so they eat aphids and caterpillars.

Dormouse nests

Dormice are mainly nocturnal and spend most of the time in the branches. In spring and summer, dormice weave their nest up in the branches where there's food available. Later in winter **they descend to the ground to hibernate**. The temperature here is low and fairly constant. Also, the air is always moist, reducing water loss and it prevents dormice from becoming dehydrated.

Summer nest

Shredded honeysuckle bark or other fibrous material is made into a ball about the size of a grapefruit and can be found in bramble bushes.

Awake time

Winter nest

A tight woven fibrous nest, about the size of a tennis ball. They make them on the surface of the ground or in a small depression.

Hibernation time

8-15 cm

6.5 cm

Tennis ball

Main nest materials: A few leaves are built into a loose outer layer.

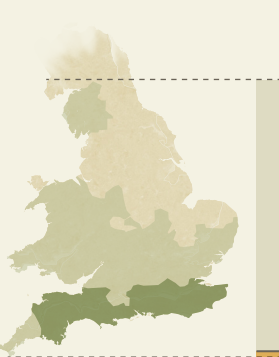
The dormouse spends 40% of its year in hibernation.

Vulnerability

Dormice are very vulnerable to habitat quality, weather, population size and dispersal corridors. These are the main factors which mean dormice are on the brink of extinction.

DORMOUSE DISTRIBUTION

Widespread populations Scattered populations



Map: PTES Dormouse Research

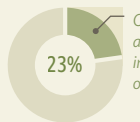


HABITAT

The best habitat for dormice is semi-natural woodland. **This habitat now occupies only 2-3% of the land in England and Wales.**

32,000 ha

of ancient semi-natural woodland have been lost from these counties since 1930.



Only 23% of all woodland in England is of this type.

The rest are plantations and various other woodland types that usually offer less optimal habitat for dormice.

WEATHER

Dormice live in areas where there's more sunlight. Sunshine opens flowers and helps insects to grow (both essential foods).

- Sunny & warm summer
- Cold winter
- Excessive rain
- Variable winter

Variable winters cause problems (e.g. waking the animals while they hibernate)



OTHER MAMMALS



Grey squirrels

Grey squirrels are more abundant than red squirrels and they eat a similar diet to hazel dormice. As they're bigger than dormice, they need to take larger quantities of food.



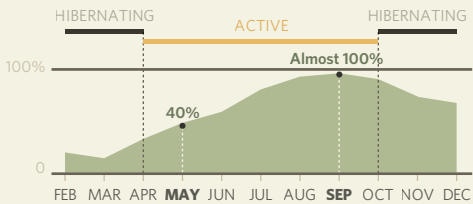
Deer & rabbits

Roe, muntjac and fallow are all increasing in numbers and distribution. Deer and rabbits browse and reduce understorey (e.g. hazel and bramble). It tends to reduce the regeneration of all tree species.

ACTIVITY AND DAILY TORPOR

Photoperiod* (the physiological reaction of organisms to the length of day or night) is the principal external factor influencing dormouse activity throughout the year. Although this varies between individuals, the majority of dormice tend to be more active in September than in May.

% Adults active (1990 - 2013)



Daily torpor

Torpor is somewhat like hibernation: The dormouse's body becomes cold. During cool or wet periods in summer, dormice may spend several hours a day in a state of torpor. Torpor probably saves around 20% of the energy that would normally be used during a day.

RESPIRATORY RATES

The following chart shows the respiratory rates of 16 dormice under anaesthesia.



Data provided by The Zoological Society of London (2015 Record).

Things to do

REINTRODUCTION

There is a desire to reinforce populations in areas where dormouse sites are few and widely scattered as a result of habitat fragmentation.

The first re-introduction took place in 1993 and since then 18 re-introductions have taken place throughout England.

PROVIDE NEST BOXES

They're good for dormice and provide information to ecologists.

Inspecting nest boxes requires a licence from Natural England or Natural Resources Wales in areas where dormice are already known to be present.

HABITAT MANAGEMENT

Conditions for dormice may therefore be improved by appropriate planting, coppicing, thinning or felling.



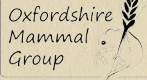
More info: greenboot.co.uk

Acknowledgements

Amanda Lloyd
Ian White
Gabriela Peniche

Illustrations & design

Clara Prieto



Sources

'The dormouse conservation handbook' by Paul Bright, Pat Morris and Tony Mitchell-Jones.

'Dormice. A Tale of Two Species' by Pat Morris.

'Managing Small Woodlands for Dormice. A Guide for Owners and Managers' by Ian White and Laura Hurt.

'The Hazel Dormouse' by Rimvydas Juškaitis and Sven Büchner.

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