How to Manage your Hedges for Dormice

Introduction

Hedges are more than just lines of shrubs. They usually have some sort of herbaceous growth at or near the base and many contain emergent trees. They may be set on banks and can have ditches along one or both sides. The best hedges have wide margins, often referred to as buffer strips or headlands, which are managed differently from the arable or grass crop. These five different components: mature/emergent trees, shrub layer, base/bank, ditch and margins, need to be thought about when deciding how to manage a hedge.

Species-rich hedge
Photo: Rob Wolton

A Good Hedge for Dormice

The key hedge components for dormice are the shrub layer and the base. The shrub layer should be species-rich and dense. It should not be gappy at the bottom and it should provide continuity of habitat along the full length of the hedge (i.e. no gaps).

The shrub layer needs to have a wide variety of different shrubs, trees, climbers (e.g. honeysuckle) and ramblers (e.g. bramble) that are allowed to flower and fruit freely. This will ensure the hedge provides good feeding and nesting habitat from spring to autumn. Particularly favoured species include blackthorn, hawthorn, holly, honeysuckle, hazel, oak, gorse and bramble. Dormice weave their summer breeding and shelter nests in dense growth (roughly April to October). The twisted, knotted stems that occur where hedges are cut repeatedly are a favourite nesting place, as are outgrowths of bramble and field rose. Nests can be as low as 30cm off the ground, partly supported by tussocky grasses or rushes, or up to two metres high (occasionally more). Tree holes are rare in hedges unless old mature trees are present, but will doubtless be used when present.

Dormouse nest
Photo: Rob Wolton

The base and/or bank of a hedge are used by dormice to hibernate. The dormice build their hibernation nests often not in dry sheltered hollows amongst tree roots or deep in a bank as might be expected, but rather in small depressions on the surface, in exposed places, which are often very moist, with just a covering of leaf litter.

A key attribute is connectivity. A hedge that is well connected to other hedges and patches of scrub and woodland, helps adults find food and safe nesting sites throughout their active months and enables the young to disperse. It also makes the hedge a good movement corridor for dormice coming from other habitat patches in the landscape.
Although dormice prefer not to have to come down to the ground to cross gateways and other gaps in the hedge, they will do so, but the fewer gaps the better.

Hedge with bramble margin
Photo: Rob Wolton

Hedge Components used by Dormice

Mature/Emergent Trees	✓
Shrub Layer	✓
Bank/Base	✓
Ditch	x
Margin	?

Key Management Tips

- Keep hedges thick by cutting them, but only once every three years and no more than one third of hedges on the farm in any one year, safety and access considerations excepting.
- Leave some hedges uncut for longer to produce really big flower and fruit crops.
- Rejuvenate hedges when they become gappy at the base, to keep them healthy, by laying rather than coppicing.
- Cut and lay hedges in the winter (November – February). Carry out any ditching or bank repair in September or October (after the main breeding season and before hibernation). Keep fire sites, paths and track ways to a minimum.
- Try and create a mix of hedge heights within every 20 ha or so block. As a rough guide, aim for 5% of hedges to be recently laid or coppiced, 60% between 1m and 3m tall, 30% between 3m and 5m high, and 5% lines of trees.
- Encourage outgrowths of bramble or field rose clumps at the side, as they provide excellent nesting places, and are a good food source. Clumps need not be very big, a metre or so wide is sufficient.
- Join up missing links in the landscape by planting new native species-rich hedges.

Juvenile dormouse
Photo: Rob Wolton

Ecology of the Dormouse

The hazel dormouse *Muscardinus avellenarius* is a small mammal with a bushy tail that prefers to live in woodland edge and scrub habitats, and also hedges. It feeds on a wide range of different foods, ranging from flowers in the spring, caterpillars and other insects in the summer, and berries and nuts in the winter. They are strictly nocturnal, and hibernate in winter. Although they can live for up to five years, they spend most of it asleep or torpid, so safe nesting places are most important.

They forage and nest in trees and shrubs, only coming down to the ground in the winter, for hibernation. They are surprisingly flexible in their behaviour and able to survive in a wide range of woody habitats.

Historically dormice were widespread over much of England and Wales, but their range contracted southwards considerably in the last century probably due to a decline in habitat quality through cessation of woodland coppicing and the introduction of annual cutting of hedges. However, many hedge networks in southern England and Wales still contain strong populations of dormice, especially in the South-West England.

Dormice are protected under the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats & Species Regulations 2010 (as amended). They are recognised as Species of Principal Importance for the conservation of biodiversity under Section 41 (England) and Section 42 (Wales) of the Natural Environment and Rural Communities (NERC) Act (2006).

Hedge laying
Photo: Rob Wolton

Further information

Bright, P., Morris, P. and Mitchell-Jones, T. *(2006) The Dormouse Conservation Handbook (2nd Ed.)*. Natural England. www.naturalengland.org.uk

Devon Hedge Group Leaflet (2009) *Dormice and hedges in Devon.* www.devon.gov.uk/hedges

Hedgelink leaflet (2013)*The Complete Hedge Good Management Guide*. www.hedgelink.org.uk

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