

Title: Nesting material preferences for captive dormice (*Muscardinus avellanarius*). A Report by Paignton Zoo, Devon, 2006

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Background to study

In 1992 the dormouse was added to English Nature's Species Recovery Programme and a breeding programme was established to captive breed dormice for release at designated sites. Studies using dormice in captivity allows information to be gained into different aspects of dormouse biology that would otherwise be difficult to obtain due to their nocturnal and elusive habits. Information on the nesting preferences of dormice provides an insight into their biology and is thus of conservation importance.

Method

- Nesting material preferences and nesting behaviour of captive dormice (8 and 5 individuals respectively) were recorded within Paignton Zoo.
- Fresh nesting material; leafy twigs from willow, bramble, ivy, clematis and honeysuckle, alongside moss, dead leaves and grasses were provided daily and every 3 days nests were dismantled and the proportion of fresh and dry mass of each material was determined.
- Infrared cameras set up for 6 nights were used to observe dormice behaviour including time spent manipulating and contacting nesting material, moving, feeding, drinking and social contact. Observations were made at half hour intervals on different nights.

Key results

- Significantly more nests were constructed out of bramble and hazel material and moss and grass in comparison with other nesting materials.
- On average dormice spent 5.9% of their nocturnal activity manipulating nesting materials and 18.3% of their time within a nest box which would include time spent constructing nests.
- There was a lot of variation in the number of nests they make and the time spent manipulating nesting material.

Key messages to landowners and managers derived from these results

- Hazel and bramble, moss and grass may be as important as honeysuckle as a nesting resource for dormice. These species will be especially important to dormice in woodlands where natural tree hollows are unavailable and natural nests are required.
- Accessibility of nesting material at sites occupied by dormice is important to allow adequate time to be spent on nest construction which may be up to a quarter of their nocturnal activity.
- The provision of natural nesting material in captive dormice housing is recommended to enable dormice to construct nests and prepare them for releases into the wild.

Key words/phrases

Dormice; *Muscardinus avellanarius*; nesting material; behaviour; captive dormice; reintroductions