

Title: Wilder Wych Dormouse Research Project: Chapter 1, Habitats. *A Report to the Peoples Trust for Endangered Species, 2011*

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Background to study

To re-establish dormice within their historical range, a Species Recovery Programme was initiated in 1996 to release captive bred dormice into suitable sites unlikely to be naturally recolonised due to the species poor dispersal ability. As part of this programme, 53 dormice were released into semi natural ancient woodland in the Wych Valley in 1996/7. The population has been monitored for the last 15 years and details on their habitat preferences have been studied.

Method

- Environmental factors were recorded within a 10 m radius of 217 nestboxes in July 2011 and included; vegetation composition, canopy connectivity and density of shrub layer. Frequency of nest box use was calculated and correlated to each factor to determine any habitat preferences.
- Comparisons between environmental factors in woodland compartments actively utilised by dormice and those with relatively low dormouse activity were undertaken.

Key results

- Five of 21 tree and shrub species recorded showed a significant relationship with frequency of nest box use by dormice. The presence of Elder, Alder and Oak species reduced nest box use, whereas Norway spruce and Larch positively influenced the use of nest boxes by dormice.
- Higher connectivity in the woodland canopy increased nest box occupancy, whereas shrub density and diversity showed to negatively affect the frequency dormice utilised nest boxes.
- Dormice were less active in compartments which had lower shrub density, significantly more holly and sycamore and less ash and poplar. Shrub diversity and canopy connectivity did not influence the core areas of dormouse activity recorded across the site

Key messages to landowners and managers derived from these results

- Conifer dominated woodland blocks are potential dormouse habitat and surveys to establish presence should be conducted especially when within or near deciduous woodland blocks
- Conifer compartments within deciduous woodlands occupied by dormice are suitable for locating dormouse nest boxes due to a lack of natural nest sites.
- Woodlands dominated by holly and sycamore with low shrub density may not provide favourable habitat for dormice.
- Nest boxes located in areas of high shrub density and low canopy cover may not be utilised due to the presence of alternative nest sites and surveys for presence should be accompanied by natural nest searches and nut searches to reduce the risk of falsely identifying unoccupied sites.
- Placing nestboxes throughout different woodland compartments will provide useful data on habitat preferences that can help direct future woodland management.

Key words/phrases

Dormice; *Muscardinus avellanarius*; reintroductions; habitat preferences; conifer; nest boxes; dispersal