Title: Habitat factors influencing occupancy of nestboxes by common dormice (*Muscardinus avellanarius*) at Slepton Ley NNR, Devon. *BSc dissertation (Cardiff University), 2004*

Authors: S Smith

Country: England

Background to Study:

Dormice are historically associated with hazel and coppiced semi natural ancient woodland. Currently it is thought that dormouse distribution in Britain is contracting southwards and there are reports of populations occupying unusual habitats. In Devon, dormice are found in coastal blackthorn and bramble scrub as well as typical hazel coppice. Establishing which features determine dormouse presence in different habitat types is important for their conservation.

Method:

- A hazel coppice and a blackthorn scrub site occupied by dormice were surveyed.
- Habitat characteristics were recorded in 8 directions around dormouse nest boxes including; length of continuous canopy cover between 1 and 4+ metres above ground, percentage visible horizontal foliage density as 10 cm divisions at 2 and 4 m from nest box.
- 4 x 4 m quadrats around each nest box were used to record % cover values. Species within the quadrat were indentified and abundance estimated.
- 60 nest boxes were checked once per month over two years to establish presence/absence and give relative density/ha for each site and nest box occupancy rates.

Key Results:

- Percentage cover of species were evenly spread at both sites indicating good food resource availability, but the coppice site had significantly less plant species diversity than the scrub site.
- There was no significant difference in population density/ha or occupancy rate of nest boxes between sites.
- Significant results were recorded in the coppice woodland between dormouse presence and the percentage of visible horizontal foliage 2 meters from the nest box.
- The presence of Hart's tongue fern showed a significant positive correlation to dormouse numbers within the woodland coppice, whilst the blackthorn scrub showed significant positive correlation to percentage cover of ash, blackthorn, western gorse and apple and a negative correlation to percentage grass cover.
- Honeysuckle was not found to be correlated with dormouse numbers at either site.

Key messages to landowners and managers derived from these results:

- Hazel coppice and blackthorn scrub can provide suitable habitats for dormice due to the food resource availability and growth patterns providing interconnected branches and dense cover.
- Blackthorn scrub could be as valuable habitat as hazel coppice and should be considered for future land management objectives

Key words/phrases

Dormice; *Muscardinus avellanarius;* habitat selection, blackthorn scrub, hazel coppice, nest box occupancy