

**Title:** The food of the Common dormouse, *Muscardinus avellanarius*, in South Devon. *Mammal Review* 1984.

**Author:** C.G. Richards, A.C. White, E. Hurrell & F.E.F. Price

**Country:** UK

### **Background to study**

The ecology of the dormouse is little understood and yet the species is thought to be declining in abundance. Therefore it is vital to collect systematic data on habitat requirements in order to develop a conservation strategy. This paper collected data from a long observed population in South Devon on the food usage of dormice and make inferences on habitat requirements and interactions with other small mammals.

### **Methods**

- Four collecting boards were set at 10 m intervals within hazel coppice. Boards were wedged between hazel branches approximately 1.5 m above ground level, making them less accessible to wood mice & bank voles and protected from birds and grey squirrels using an arched cover.
- Boards were covered with a sheet of paper and baited with apple. Deposited faeces on each board were collected daily between April and November for 2 years.
- Faeces were dried and stored as single samples in air-tight containers.
- Samples were re-hydrated, boiled and ground to a paste before being put into a centrifuge and mixed with Toluidine Blue and distilled water before being placed again in a centrifuge. The excess water was evaporated and samples were magnified x100 and the contents recorded.

### **Key results**

- Dormice have a wide and varied diet which has a strongly seasonal pattern and very specific feeding habits.
- Dormice were shown to have eaten whole anthers, generally preferring to eat flowers than leaves and have a preference for immature flowers which are highly nutritious.
- When first emerging from hibernation and in mid-summer leaves and flowers are predominantly eaten from the understory (honeysuckle, bramble, willowherb) and insects observed in samples are also found in the understory.
- Once hazel nuts start to ripen dormice become active within the canopy where they eat nuts
- Dormice are adapted to feeding in habitats which have a well developed canopy and understory.
- There is spatial separation between dormice and their main competitors, wood mice and bank voles which compensates for an overlap in their dietary requirements.

### **Key messages to landowners and managers derived from these results**

- Encourage the development of dense and diverse understory along rides and woodland edges by maintaining an open canopy in mature woodlands.
- Honeysuckle, even in low density, is beneficial in feeding and nesting behaviour and disturbance of this plant in woodlands is not recommended.
- If honeysuckle is patchily distributed, encourage the development of interconnected branches of both understory and canopy to allow dormice access to this resource for foraging and nesting.

### **Key words/phrases**

*Muscardinus avellanarius*, diet, habitat, competition, wood mice, bank voles, honeysuckle