

**Title:** Feeding by the common dormouse (*Muscardinus avellanarius*): A Review, *Acta Zoologica Lituonica*, 2007

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**Country:** Non specific

### **Background to study**

Dormice are unable to digest readily available food such as leaves and as such are considered specialist feeders that obtain food from nutritious sources such as flowers, fruits and insects. Information on the foraging requirements of dormice is integral for their conservation and although studies have been conducted to establish feeding preferences, these have been specific to countries and often contradictory.

### **Method**

- A review of publications detailing feeding preferences of dormice to establish their dietary requirements across their distributional range

### **Key results**

- Dormice prefer generative parts of plants such as flower-buds, catkins, flowers, berries and seeds and ranging patterns are determined by seasonally available food sources.
- In spring, dormice exploit flowering trees and shrubs such as hawthorn, honeysuckle and oak consuming flower buds, immature inflorescences rich in pollen and nectar, catkins and conifer cones. Nuts from hazel, oak and beech from the preceding autumn provide additional food.
- Insects including Lepidoptera species, aphids, caterpillars and larvae are consumed by dormice throughout much of their range and form an important part of their diet during early to mid summer in areas where flowers have finished and fruits are not ripe.
- In late summer, berries, nuts and winged seeds are important food resources and dormice exploit species including bramble, bilberry, honeysuckle, rowan, cherry and hazel.
- During autumn, dormice exploit hazelnuts which are high in calories providing essential fat reserves in preparation for winter hibernation. Trees and shrubs bearing soft berries and fruits such as bramble, buckthorn, blackthorn and hawthorn are also exploited during this time and provide an alternative resource when hazel trees are absent or fail to crop. Seeds of ash, maple and sycamore and winter buds may provide alternative food, but are least favoured.
- Dormice will consume insects, bird's eggs, tannin rich acorns and leaves but are only likely to do so in sub-optimal habitats; when other more preferred food sources are scarce; and perhaps by females when pregnant.

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

- Optimal dormouse habitat should include high species diversity of trees and shrubs which provide a seasonal succession of food resources.
- Tree and shrub species supporting high invertebrate abundance will help to provide food sources during mid summer when other vegetal sources are not available and in low fruiting years.
- Hazel, bramble, buckthorn, blackthorn and hawthorn are important species for dormice and may help to increase overwinter survival by providing valuable food sources in autumn.
- If conserving woodlands for dormice and rarer bird species, increasing and maintaining a high species diversity of trees and shrubs will help reduce the impact of dormice on bird's eggs.

### **Key words/phrases**

Common dormouse; *Muscardinus avellanarius*; habitat preference; food sources; birds eggs; insects