

**Title:** Nest material of the common dormouse (*Muscardinus avellanarius* L.) used in nestboxes, Podilla (West Ukraine). *Polish Journal of Ecology* 514, 397-401, 2006

**Author:** H. Zaytseva

**Country:** Ukraine

### **Background to study**

The common dormouse is regularly found inhabiting nest boxes that are placed to assist the breeding of birds within oak and hornbeam forests in the Podilla region of West Ukraine. At present little is known about the habits of dormice in this region and the utilisation of bird nest boxes by dormice presents an opportunity to investigate their nesting preferences and the potential competition exhibited between birds and dormice.

### **Method**

- The study was conducted within a river valley oak-hornbeam forest. Dormice nests were searched for in 147 bird nest boxes which were located approximately 4 m above the ground and at 20 m intervals within a 6 ha area of woodland.
- In April 2004 anthropogenic materials (thread, cotton wool, tow and fishing-line) were hung on branches approximately 1 m from each nest box to investigate their use by nest box inhabitants.
- Monitoring was carried out between April and November 2004 after which all dormouse nests were removed from the nest boxes and the type (mixed, foliar, layered, grassy) and weight of each nest was determined. Materials were grouped into categories (leaves, moss, herb, wood, animal and anthropogenic material).

### **Key results**

- Dormice were most commonly found utilising bird nest boxes from the end of May/early June and nest use intensity was highest in July.
- Dormice occupied 31% of nest boxes during the study period. In comparison to observed clutches of 3 other bird species, the proportion of boxes occupied by dormice was only exceeded by one bird species (Collared flycatcher) suggesting they are a significant competitor of birds.
- Dormice most frequently invaded nests of collared flycatchers and usually used their nest building materials (twigs, grass) for construction of their own nests.
- Leaves from different tree species (rarely a single spp.) made up the greatest proportion of nest building materials. Wood and herb material were also frequently used but not to the same extent and anthropogenic and animal material were used the least (1% and 0.4% respectively).
- Hornbeam leaves were most frequently used in nest construction reflecting their relative abundance; however oak leaves which were also abundant were used the least.
- Dormice commonly built mixed nests in boxes that had previously been occupied by flycatcher, using accessible material taken from the bird's nest. Conversely, dormice preferred to build foliar nests using moss at the base in boxes previously occupied by tits. There was a slight preference towards mixed nests when the box had not been occupied by birds.

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

- Maintaining high species diversity and connectivity within woodlands is important to provide access to a range of nesting materials utilised by dormice throughout the summer.
- When conserving both dormice and birds within a woodland patch, careful consideration to the location of both bird and dormouse nesting boxes will be required to minimise nest competition.

### **Key words/phrases**

Dormouse; *Muscardinus avellanarius*; nest material; bird nest competition; Ukraine; flycatcher