Title: Peculiarities of habitats of the common dormouse, Muscardinus avellanarius, within its distributional range and in Lithuania: a review. *Folia Zool.*, 2007

Author: R Juškaitis

Country: Lithuania and Europe

Background to study

The status of common dormice in Lithuania is distinct from other countries where the species is of conservation concern and in some countries a red-lists species. As such it is suspected that their habitat preferences may differ and research into peculiarities of habitats across their distributional range may highlight reasons for their different status in Lithuania.

Method

 A review of publications on the habitat preferences of common dormice across their distributional range.

Key results

- Common dormice commonly occupy deciduous or mixed woodlands with a well-developed understorey and are found within forest edges, rides or glades where the understorey prevails.
- Dormice prefer early successional stages of woody vegetation, notably overgrown clearings and rotational coppiced woodlands which provide adequate forage and shelter. Young trees over several meters and short rotational coppice is provide unfavourable conditions.
- Hedgerows are considered good resident and dispersal habitats if shrub diversity is sufficient.
- Uncommon habitats include coastal blackthorn scrub, pure dwarf and young pine and stands, conifer plantations, willow scrub, orchards, gardens, heathland, reedbeds and meadows.
- Optimal habitat is considered to consist of a high diversity of tree and shrub species with a well developed, un-shaded understorey which interconnects with the canopy layer.
- In Lithuania, dormouse habitat includes high forests, pure Norway spruce and Scots pine and oak stands. Glossy buckthorn replaces hazel in Lithuania as the principal understorey species for dormice due to its abundance and lengthy fruiting periods providing a pre hibernation resource.
- Honeysuckle and ivy are absent in Lithuania but common elsewhere where dormouse density is higher. 39% of common dormouse localities in Lithuania are within conifer dominated woodlands and a lack of continuous food supply may explain their lower density.
- Dormice are threatened where deforestation, fragmentation and cessation of traditional management has reduced the cover of suitable dormouse habitat, however in Lithuania, forest cover is increasing, forest tracts are large (>50 ha) and clear-felling creates favourable habitat contributing to their widespread distribution.

Key messages to landowners and managers derived from these results

- The provision of optimal habitat described above and creating hedgerow corridors is essential for dormice persistence in smaller, fragmented habitat blocks.
- Dormice habitat is not restricted to deciduous and mixed woodland types; conifer forests, scrub, orchards and reedbeds should be considered as potential dormouse habitat and survey effort should include these habitat types in the presence of neighbouring high density populations.
- Early successional stages of clear felling forestry can create suitable dormouse habitat and should be considered as a management practice at sites where dormice are present.
- Increase the extent of woodland in sub-optimal habitat where dormice occur at lower densities.
- Coppicing on long rotations creates preferable habitat when compared with short rotations.

Key words/phrases

Dormice, habitat requirements, population density, forest management