

Habitat use and movement of Garden Dormice in the Harz Mountains, Germany

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Abstract

The Garden Dormouse (*Eliomys quercinus*) is an example of an endangered species with a distribution focus in Germany. Little is known about its habitat use and movements. Radio tracking is a common method used to analyze movement patterns to identify specific habitat requirements. During 11 weeks from May until September 2021, we tracked four individuals (2 females, 2 males) in the Harz Mountains National Park (~700 m a.s.l.). The study area was characterized by a predominance of rocks and spruce. Within one hour, males moved a distance of up to 173.95 m, females covered a maximum distance of 155.62 m. We analyzed whether a hiking trail cutting through the study area represented a potential barrier for the movement of these animals. Three individuals were tracked crossing the path up to 4 times a night. Raspberry bushes along the path were a potential incentive for crossing. A dense rocky cover and a well-developed shrub layer with raspberry bushes within spruce woodlands seem favorable to the presence of Garden Dormice. For the conservation of this species, it is necessary to protect similar habitats. To connect areas with populations of garden dormice, it may be important to encourage bushes with wild fruits among forest edges and pathways.

Keywords

In search of the Garden Dormouse, radio tracking

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Conflicts of interest