

Habitats change habits: How Garden Dormice cope with different environments in Germany

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Abstract

The Garden Dormouse is currently disappearing from parts of its range. While its population is declining in many parts of Germany including forest habitats in low mountain ranges, a stable occurrence is found in some cities. A radiotelemetry study was performed in the spruce forests of the Harz National Park (mountains) and the city of Wiesbaden to compare space and habitat use, and the structure and use of daytime nest sites (DNS) used for rest.

In total, eight individuals (5 males, 3 females) were tracked between May and September 2021. They used smaller home ranges in the city (MCP100: 2.39 ± 1.34 ha; $n = 4$) than in the forest (MCP100: 4.56 ± 3.13 ha; $n = 4$). At night, the animals used structures offering protection from predators and providing food like wide hedges in the city and rock crevices and berry bushes in the forest.

The animals were located in a DNS a total of 133 times, and one to ten different DNS per animal were identified. They were situated in structures providing a high degree of protection from predators and also had consistent temperatures (e.g. rock crevices, deadwood piles, hedges, vines on buildings, nest boxes, and buildings). While females rarely changed their DNS, males used several of them.

Recommended conservation measures for Garden Dormice include raising public awareness and also the protection and promotion of facade greening, hedges and old buildings in urban areas. A dense rocky cover, as well as a well-developed shrub layer with raspberry bushes are valuable in spruce woodlands.

Keywords

In Search of the Garden Dormouse, telemetry, home range, nest site, Gliridae

Presenting author

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Presented at

Oral presentation at the 11th International Dormice Conference (May 9-13, 2022)

Conflicts of interest