

How to deal with Hazel Dormice affected by large infrastructure projects

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Abstract

Hazel Dormice (*Muscardinus avellanarius*) are protected by national implementation of European law. Protection comprises of the prohibition of physical harm to individuals and the destruction of breeding or nesting sites. Due to Germany's policy goal of changing from a fossil fuel dominated energy supply to more sustainable energy sources, large infrastructural projects became crucial to, for example, redistribute energy from Northern and Eastern Germany to Bavaria. Within the context of the inevitable building projects, the protection goals for species like the Hazel Dormouse need to be maintained.

The layout of such a project with a linear design stretching across hundreds of kilometers and intersecting different landscapes and habitats poses new challenges. Aspects of the construction phase of underground cables need to be considered in planning as well as the design of the protective strip above the finished cable. In order to plan mitigation and compensation measures, species presence and absence data need to be collected effectively.

A total of 223 sample sites along a 207 km long corridor were equipped with 5,499 nest-tubes and monitored regularly. For habitat potential, biotope types were assessed and mapped within the corridor. All types of potential Hazel Dormouse habitat were selected considering regional differences. Based on previous research, we established guidelines for the transferability of presence and absence data.

We present the procedure for data collection spanning a vast area using nest-tubes, proposed guidelines for the transferability of results, as well as mitigation and compensation measures necessary to ensure protection of the Hazel Dormouse.

Keywords

Hazel Dormouse, underground cable, habitat assessment

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