

Conference Abstract

Comparing methods to detect Garden Dormice (*Eliomys quercinus*) in mountainous forest habitats

Sarah Beer[‡], Klaus Hackländer^{‡,§}, Johannes Lang^l

- ‡ University of Natural Resources and Life Sciences, Vienna, Austria
- § German Wildlife Foundation, Hamburg, Germany
- | Justus-Liebig-University Giessen, Clinic for birds, reptiles, amphibians and fish, Working Group for Wildlife Research, Giessen, Germany

Corresponding author: Sarah Beer (sarah.beer@t-online.de)

Received: 05 Apr 2022 | Published: 15 Apr 2022

Citation: Beer S, Hackländer K, Lang J (2022) Comparing methods to detect Garden Dormice (*Eliomys*

quercinus) in mountainous forest habitats. ARPHA Conference Abstracts 5: e84916.

https://doi.org/10.3897/aca.5.e84916

Abstract

Garden Dormouse populations show a severe and ongoing decline all over Europe. The drivers for this process are still unknown, as well as the exact distribution of the remaining populations. An evaluation of the occupied habitats could give information on important habitat parameters. Therefore, it is essential to improve detection methods and to evaluate the efficiency of available techniques. In this study, three different methods were tested on ten transects in the Fichtel Mountains, Germany. On each transect we installed two camera traps (CT), one autonomous sound recording unit (AudioMoth, AM) and 25 footprint tunnels (FT), which were checked weekly from the beginning of June until the end of October. AMs did not record a single call, FT detected Garden Dormice in seven and CT detected them in all ten transects. FT worked best during July, when they provided evidence of Garden Dormouse on six transects. CT worked best in August and September, confirming Garden Dormice in all ten transects. In every month, CT outperformed FT in the number of positive findings, and in the time interval until initial detection. CT worked most efficiently in this type of habitat, whereas FT produced false absence data. As Garden Dormice inhabit a variety of different habitats, this study should be repeated to see if the results are transferable.

[©] Beer S et al. This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

2 Beer S et al

Keywords

In Search of the Garden Dormouse, camera traps, footprint tunnels, acoustic monitoring, Gliridae

Presenting author

Sarah Beer

Presented at

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

Funding program

This project is/was funded by the German Federal Agency for Nature Conservation with resources from the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection.