ARPHA Conference Abstracts 5: e84775
doi: 10.3897/aca.5.e84775

Conference Abstract

The masked singer: vocalization in the Garden Dormouse (*Eliomys quercinus*)

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Received: 02 Apr 2022 | Published: 15 Apr 2022

Citation: Meinig HU, Nava TF, Thivierge S, Büchner S, Lang J (2022) The masked singer: vocalization in the Garden Dormouse (*Eliomys quercinus*). ARPHA Conference Abstracts 5: e84775.
https://doi.org/10.3897/aca.5.e84775

Abstract

Many animals make sounds for various reasons, mostly for mating and agonistic behaviour, but also for more complex social communication. These sounds are used for mapping and monitoring many animal groups and species (e.g. birds, bats, whales, grasshoppers, crickets) for mapping and monitoring. Although Glirids are known to use sounds for communication, to our knowledge vocalisations have only been used to map the Edible Dormouse. We checked the possibility of detecting the Garden Dormouse calls and used oscillograms and spectrograms to analyze these sounds. Garden Dormouse calls were recorded as mp4 files and converted to WAV format for this purpose. In combination with video recordings, the vocalisations could often be associated with the respective behaviour of the animals. Most analysed calls were related to apparent arousal, intraspecific aggression, mating or social communication within a family group between old and young animals. Some of the different calls are not yet clearly understood in their ethological context. Regardless of this, Garden Dormouse vocalizations can be clearly assigned to the species and distinguished from other species. It therefore provides a new

method for mapping this species. When Garden Dormice mainly call in urban habitats, human impacts like habitat fragmentation, direct disturbance or noise pollution may challenge their acoustic behaviour in this environment.

Keywords

In Search of the Garden Dormouse, animal communication, bioacoustics, small mammals

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Presented at

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