

Ecological characteristics of the zoocoenoses and classification of the animals' habitats from Sarnena Sredna Gora Mts

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During a research of the biodiversity of Sarnena Sredna Gora Mts in 2018–2020, the ecological characteristics of the habitats of several model groups of animals were studied: **earthworms** (Oligochaeta: Lumbricidae), **earwigs** (Insecta: Dermaptera), **cockroaches** (Blattoptera), **ground beetles** (Carabidae), **ants** (Formicidae), **amphibians** (Amphibia: Caudata, Anura), **reptiles** (Reptilia: Testudinata, Squamata: Serpentes, Sauria), **birds** (Aves), and **small mammals** (Micromammalia: Eulipotyphla, Rodentia, Lagomorpha). The results served as a basis for ecological analysis and subsequent typification of the habitats, according to the specific requirements of the animal biota. The determination of the conservation significance of the habitats was performed by analyzing the species and groups of species with conservation status or limited distribution in Bulgaria and in the studied area. The specific threats to the biodiversity and habitats in the region of Sarnena Gora were summarized and analysed, and measures for mitigation, limitation or elimination of the negative impacts were proposed, according to the Bulgarian and international nature conservation legislation.



Old beech forests

Faunal complexes include many specific species. Most of them are dependent on the presence of the dead wood. Here we found two new beetle species for Bulgaria.

Coniferous plantations

Relatively poor in species, but still maintaining specific complexes.

Mixed deciduous forests at lower altitudes

These habitats have great productivity and maintain a various and specific fauna of mostly mesophilous species.

Pastures

They maintain populations of both eurytopic, and rare and stenotopic species with high conservation value.

Riverine forests and wetlands

The fauna is of a riparian type and includes many hygrophilous and mesohygrophilous species, some of which with a limited range of habitation. The forms which inhabit these complexes are almost always intra- or extrazonal stenobionts.

Agricultural landscapes

Their catastrophic nature is obvious, but they are important habitats for many species. Here we found a new beetle species for Bulgaria.