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Conference Abstract

# Diversity and conservation of the cave fauna of Crete (Greece)

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## Abstract

Located in the southernmost of the Aegean Sea, Crete is the largest of the Greek islands covering an area of 8,261 km<sup>2</sup>. The first records on the cave fauna of Crete were published in 1869 and since then a total of 175 publications have been gradually increased our knowledge on the cave-dwelling species of the island.

Crete is currently the best-studied Region of Greece regarding biospeleology. Although it covers only 6.3% of the national area, the faunistically investigated caves represent 35% of the investigated caves of Greece while the recorded cave fauna includes 30% of the cavernicolous species of Greece. In total, 250 species belonging to 166 genera, 83 families, 36 orders, 13 classes, and 5 phyla, have been recorded from 158 caves. The most diverse groups are Araneae (64 species), Isopoda (29 species), Gastropoda, Copepoda, and Coleoptera (21 species each), Pseudoscorpiones (17 species) and Chiroptera (15 species). Among the invertebrate species, 102 are endemic to Greece of which 92 are Cretan endemics. The obligate cavernicolous fauna includes 42 species, most of them in Isopoda (13), Araneae (11) and Pseudoscorpiones (11). Only 3 species are distributed outside Greece, the isopods *Libanonethes probosciferus* Vandel, 1955 and *Trichonethes kosswigi* Strouhal, 1953.

The cave habitats and the cave fauna of Greece are quite neglected in Greece's environmental legislation and policy. Furthermore, there is an implementation gap in the environmental law. In Crete, 62 out of the previously mentioned 158 caves happened to be

situated within protected areas (wildlife refuges and/or Natura 2000 sites). With the exception of the bat species, no other cave associated species is protected by specific law. Further efforts are also needed to assess the conservation status of most of the species. Out of 250 species only 35 have been assessed for IUCN Red List and 51 for Greece's Red Data Book. Most of them are bats, gastropods and isopods.

## **Keywords**

Cave fauna, biodiversity, conservation, protection

## **Presenting author**

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