



Conference Abstract

# Evaluating different conservation approaches to protection of subterranean fauna in Slovenia

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## Abstract

Due to increasing human activities with negative impacts on wildlife and natural habitats, it has become necessary to establish conservation policies protecting at least parts of natural diversity. Subterranean fauna presents a challenge for conservation as species with small ranges or single site occurrences are common. In addition to the high level of strict endemism, the concealed lifestyles in habitats that are difficult to access make it challenging to establish the conservation status of subterranean species. Conservation approaches have different practical implications, but they should: i) include a sufficient number of important sites or proportion of species populations, and ii) involve monitoring of target species and habitats to check the effectiveness of conservation efforts.

We evaluated both aspects in two study cases on subterranean fauna from Slovenia, which is known as one of the global biodiversity hotspots in the Western Balkans. In the first case, we investigated to what extent current conservation schemes cover single site species. In the second case, we studied a region in Southern Slovenia and evaluated to what extent the EU legislation, namely EU Habitats directive, has been successfully implemented. In the frame of the latter, Sites of Community Importance were designated also due to the presence of important cave habitats and subterranean species. Our results suggest that the inclusion of important subterranean sites in conservation schemes is considerable. But,

the apparent lack of research and monitoring of both subterranean habitats and species hampers the conclusions on effectiveness of different conservation approaches.

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