ABUNDANCE, DIVERSITY AND ECOLOGICAL STRUCTURE OF HERPETOFAUNA IN A MOUNTAINOUS PROTECTED AREA OF GREECE

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Many reptile and amphibian species are in decline worldwide. This situation is further exacerbated in Europe where long-standing excessive anthropogenic activities have degraded natural habitats with deleterious effects for the herpetofauna. National Parks function as conservation pockets, providing the required undisturbed habitat for the survival of many threatened species. Since reptiles and amphibians are increasingly used as bioindicators, the monitoring of their populations offers valuable information regarding the status of conservation areas. The mountainous region of Tzoumerka, known for its scenic beauty and rich biodiversity, was recently declared National Park. The knowledge on population status and even distribution of Greek herpetofauna remains impressively understudied in the mainland country. Our aim was to assess abundance and diversity patterns and also the ecological structure of reptiles and amphibians at the Tzoumerka Mountains National Park. In time constrained visits we surveyed 20 sites by random transects and recorded a total of 20 reptile and six amphibian species, five of which are protected. The toad Bufo bufo, the lizard Podarcis tauricus, and three snake species, Platyceps najadum, Elaphe quatuorlineata and Typhlops vermicularis, were recorded for the first time in the area. Mediterranean shrublands supported the highest reptile diversity, while amphibian species richness appeared to be related to the diversity of water habitats. However, species richness and composition of the herpetofauna differed between sampling sites of the same habitat type, suggesting that vegetation type is not the main determining factor. The ecological structure of the herpetofauna was influenced by altitude. No specific habitat type was found to

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