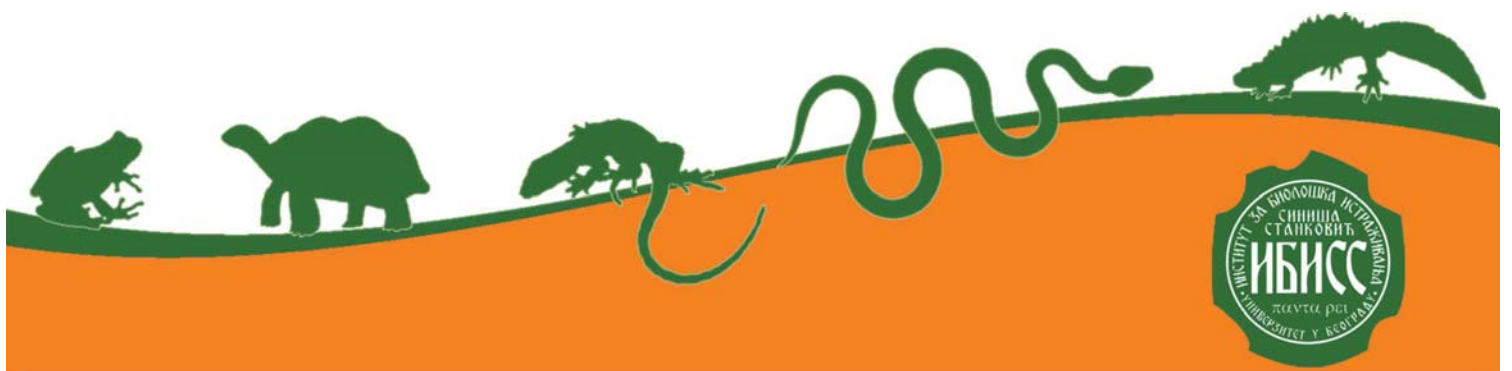




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Poster presentation

Updated distribution of the endangered and highly specialised meadow viper (*Vipera ursinii macrops*) in Serbia

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The meadow viper is the smallest and most endangered European viper, mostly due to the high level of habitat specialisation, low dispersal ability and fragmented distribution. In the Balkan Peninsula, isolated populations of *Vipera ursinii macrops* inhabit alpine and subalpine meadows above 1000 m. Here we updated the distribution of the meadow viper in the Mokra Gora Mt., SW Serbia, and revised the conservation threats affecting this subspecies and its habitats. Field sampling effort totalled 25 field days in spring and summer 2020-2022. A total of 8 vipers were found, distributed by three 1x1 km grid cells. Ecological models (developed using Maxent) based on climate and land-cover variables identified 28 grid cells on Mokra Gora Mt. with suitable conditions for the occurrence of meadow viper. The most important environmental factors related to its distribution were maximum temperature of the warmest month, precipitation of the driest and warmest quarters, annual potential evapo-transpiration, and land-cover (moors and heathlands, natural grasslands). Local conservation threats (following IUCN standard threats) include the potential development of tourism and recreation areas, renewable energy (windmill farms), logging and wood harvesting, with associated developments of road networks, and habitat shifting and alteration (abandonment of traditional pastoral farming and climate change). The low number of individuals detected in comparison to other Balkan populations suggests very small local populations. Additional localities in Serbia were identified as suitable for meadow viper occurrence (e.g. Jadovnik and Javorje Mts.) and they should be targeted for future sampling. Long-term conservation of the subspecies at the Mokra Gora Mt. requires a better regulation of logging and building activities, in order to safeguard the currently occupied habitats. The region should be considered for classification as a protected area, given the occurrence of other animal and plant species, which might lead to better habitat protection.