

## A new record of *Vipera ursinii* (Reptilia: Serpentes) from Macedonia

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**Abstract.** *Vipera ursinii* is recorded from the Bistra Mountains in Macedonia. In addition to the Shar and Korab Mountains, this new record represents the third known locality for the species in the country.

The distribution of *Vipera ursinii* in Macedonia includes western parts of the country, exclusively. The species was first recorded by Doflein (1921) from Kobilica in the Shar Mountains. This site was also mentioned later by Buresch & Zonkow (1932; 1934), Karaman (1938; 1939) and Radovanović (1951). Dimovski (1964) recorded *V. ursinii* at the Korab Mountains (Kobilino). The Shar Mountains in the north-western part of the country range from the Serbian border in the north to the Albanian border in the west. The Korab Mountains spread from the edge of the Shar Mountain to the south, along the Abainan border, with an average altitude of more than 2500 meters a. s. l.

The above mentioned localities were the only records of *V. ursinii* for Macedonia for the last 60 years. During field research in 2003, a new locality was discovered at the Bistra Mountains: Bistra planina, UTM coordinates DM 80-81, National Greed UTM 10 x 10 km Reference) (Figure 1.). This locality represents the southernmost point of distribution of *V. ursinii* in Macedonia.

The Bistra Mountains are part of the Scardo-Pindic group of mountains and extend through the western parts of Macedonia. The highest peak is Medenica with 2163 m a.s.l. The relief is glacial and there are remnants of glaciers and cirques. There are also karstic elements. Vegetation at the mentioned locality constitutes *Calamintho grandiflorae* - *Fagetum* in the lower parts (below 1600 m a.s.l.) and high mountain pastures in the upper parts (above 1600 m a.s.l.). The climate of this region can be considered as continental with cold and wet winters

and warm and dry summers. It is characterized by an average annual temperature of 7 °C (from -2.2 °C in January to 16.3 °C in July), with an annual precipitation of about 1103 mm and 70% relative humidity throughout the year (Lazarevski, 1993).

The habitat of *Vipera ursinii* populations from the Bistra Mountains is situated between 1650-1900 m a.s.l. (approximately). The biotopes are predominantly grassy and represent typical mountain pastures with scattered stone piles and several sites with bushes of *Juniperus communis* and *Vaccinium myrtillus* (Fig. 2.).

Giving the fact that *Vipera ursinii* is included in the CITES list and considered to be endangered in the IUCN Red List, we found that urgent conservation measures are required at national and regional level. But first, more precise data about distribution range, population status and threats in Macedonia are urgently needed.

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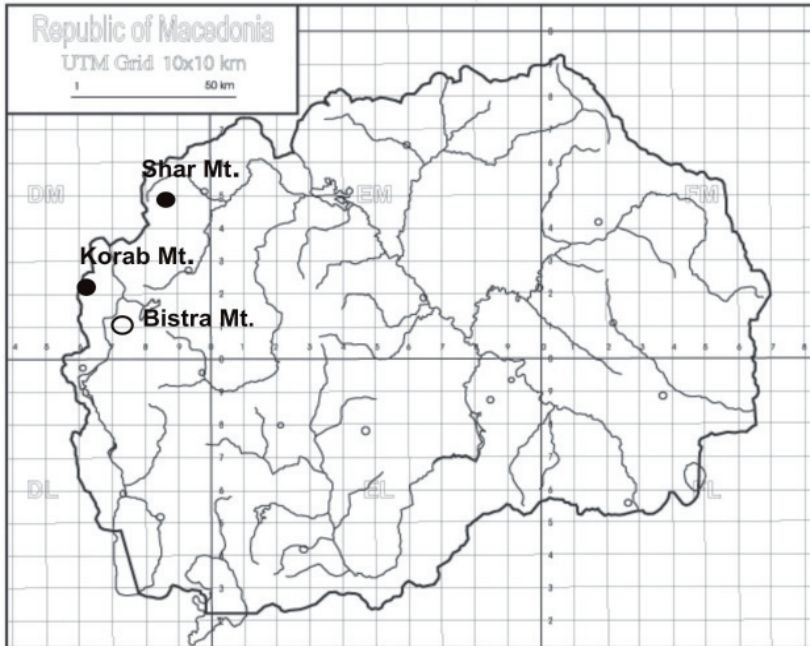
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**Figure 1.** New locality of *Vipera ursinii* in Macedonia (UTM coordinates DM 70-71, National Greed UTM 10 x 10 km Reference) – open circle; previously recorded localities – black circles.



**Figure 2.** Habitat of *Vipera ursinii* in the Bistra Mountains.