

Short note

*The Second Record of a Rare Lizard Species, *Darevskia praticola* (Eversmann, 1834), in the Jiu Gorge National Park, Romania*

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Abstract. *Darevskia praticola* was encountered for the second time in the Jiu Gorge National Park, Romania. The species was observed in August 2018, in a compact beech forest, at 562 m altitude. This record indicates that the forests in the Jiu Gorge National Park could shelter species whose distribution is, even nowadays, insufficiently known.

Key words: protected area, lizard, distribution range, habitats.

Darevskia praticola (Eversmann, 1834) is a rare lizard species, difficult to observe even in regions where it was previously recorded, its distribution range is determined mostly by the existence of forests and by the average temperature in the cold season (see in: [ĆOROVIĆ et al., 2018](#)). In Romania, its distribution range partially covers the southern and south-western regions (e.g. [SOS et al., 2012](#); [COGĂLNICEANU et al., 2013](#); [ĆOROVIĆ et al., 2018](#)). Nevertheless, despite the new records in those regions (e.g. [IFTIME & IFTIME, 2006](#); [GHERGHEL et al., 2011](#); [GACEU & JOSAN, 2013](#); [BOGDAN et al., 2014](#)), its distribution is still insufficiently known, both in Romania and the Balkan Peninsula ([ĆOROVIĆ et al., 2018](#)). *D. praticola*'s relation with forests suggests that this species was present in the entire southern Romania before the massive deforestation of this region ([GHERGHEL et al., 2011](#)). The Jiu Gorge National Park, situated in southern Romania, is still covered with large, especially beech, forests ([THEME no.11.RA/2004](#)). In the Jiu

Gorge National Park *D. praticola* was mentioned only once, 10 years ago, in the park's southern sector, in a meadow surrounded by beech forests ([COVACIU-MARCOV et al., 2009a](#)). *D. praticola*'s rarity and presence only near the park's southern limit seems logical, because according to a recent study the park's region is situated close to this species habitat suitability limit ([ĆOROVIĆ et al., 2018](#)). This fact is even more plausible, because *D. praticola* distribution is strongly influenced by temperature ([ĆOROVIĆ et al., 2018](#)), and in the park's northern regions there are high mountain areas ([MÂNDRUȚ, 2006](#)) with low temperature in the winter ([STOENESCU et al., 1966](#)). Also, despite recent studies, the species was not mentioned in the mountain regions neighboring the park ([IFTIME & IFTIME, 2014](#)). Nevertheless, in the year 2018 we identified a new distribution point of *D. praticola* in the Jiu Gorge National Park, situated to the north-east and at a higher altitude than the previous one.

D. praticola was accidentally encountered in August 5th, 2018, in the vicinity of a thematic

route, along an abandoned forest road, which starts at the Meri railroad station and leads to a plateau named Comanda. At Meri railroad station the species was previously reported (COVACIU-MARCOV *et al.*, 2009a). Although this trail was walked dozens of times in the last 10 years, *D. praticola* was not encountered until now, a fact that confirms the difficulty of observing this elusive species (ĆOROVIĆ *et al.*, 2018). The rainy summer of the year 2018 probably favored the contact with this species. The observed individual (Fig. 1), an adult, was encountered in an almost pure beech forest, on the dense beech leaf litter on the edge of the road (Fig. 2). Nevertheless, the forest contains also oaks, which dominate in the lower regions. The beech forest continues for some hundreds of meters above the point where we observed the lizard, and then an open plateau follows. Although *D. praticola* was usually recorded near some small water courses (COVACIU-MARCOV *et al.*, 2009b; GACEU & JOSAN, 2013), in this case there was no stream close to the habitat, but the forest was dense and shady. Moreover this species could be considered an indicator for some microclimatic conditions in forests (TZANKOV & SLAVCHEV, 2016). The new distribution record is situated at approximately two kilometers from the previous one, at 562 m altitude, at the following coordinates N45°12'46,6" / E23°23'27,4".

Compared to the previous distribution points in Romania (e.g. COGĂLNICEANU *et al.*, 2013; ĆOROVIĆ *et al.*, 2018), this seems to be one of *D. praticola*'s highest altitude records in the country, even if exceptionally it was mentioned at 1000 m a.s.l. (IFTIME & IFTIME, 2006). It is possible that some individuals move upstream on the thematic route, a former forest road, taking advantage of the more open areas in its vicinity. Anyway, the new distribution record indicates that the species is probably better represented in the southern regions of the Jiu Gorge National Park, but as it is difficult to observe (ĆOROVIĆ *et al.*, 2018) new studies are still necessary. *D. praticola*'s protection should involve the protection of the forest it inhabits, and even

some forests where its presence is not yet known, since this species distribution is limited by deforestation (COVACIU-MARCOV *et al.*, 2009b; ĆOROVIĆ *et al.*, 2018). In the Jiu Gorge National Park this fact is even more important because at the park's southern part there are many forest plantations, with a poorer fauna than in the rest of the park (COVACIU-MARCOV *et al.*, 2009a; TOMESCU *et al.*, 2011).



Fig. 1. The general view of *D. praticola* from Jiu Gorge National Park.



Fig. 2. The habitat of *D. praticola* in the Jiu Gorge National Park.

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