

New Romanian distribution record
for *Darevskia praticola pontica*
(LANTZ & CYRÉN, 1919) at its
north-western range limit

The Meadow Lizard *Darevskia praticola* (EVERSMAN, 1834) is distributed in Transcaucasia, the Caucasus, Turkey, and the eastern part of the Balkan Peninsula where it is found as far as Romania to the north (STUGREN 1984; ARNOLD et al. 2007). The populations of the Meadow Lizard from Europe are considered belonging to *Darevskia praticola pontica* (LANTZ & CYRÉN, 1919 (FUHN & VANCEA 1961; STUGREN 1984; SINDACO & JEREMČENKO 2008). According to morphological analyses by LJUBISAVLJEVIC et al. (2006) the nominate form and the subspecies *pontica* represent two distinct species, but there are no genetic studies available on this subject (see LJUBISAVLJEVIC et al. 2006 for more informations).

In Romania this lizard is found only in forests of the south-western Dobroudja, in the southern part of Romania (around Bucharest and in Oltenia) (FUHN & VANCEA 1961; FUHN & HÄRSU 1962; SERBAN 1972, STUGREN 1984; ANDREI 2002; COVACIU-MARCOV et al. 2005, 2006, 2008, 2009a, 2009b; LAZAR et al. 2005; IFTIME 2001, 2003, 2005a, 2005b; IFTIME et al. 2008; IFTIME & IFTIME 2006; SAHLEAN et al. 2008), and in the Banat region and the outskirts of Deva City in the west of the country (GHIRA et al. 2002). These populations were chiefly observed along pathways in humid parts of the forests, (STUGREN 1984; IFTIME 2005; GHERGHEL personal observation). In the southern part of Oltenia, due to deforestation and the construction of irrigation canals, the populations' habitats are restricted to the margins of these structures, where the humidity is higher than in other places and lacks forest coverage (e.g., pastures and agricultural fields) (COVACIU-MARCOV et al. 2009a).

The populations around Bucharest, in particular the population from Baneasa, are critically endangered due anthropogenic impact represented by deforestation and the construction of buildings that replace remaining forest patches (IFTIME 2005a).

On May 2010 we found an adult specimen of the Meadow Lizard (Fig. 1) near Sarata Monteoru, in Buzau County (Fig. 3). The habitat where the animal was found is represented by a forest road with bushes, various grass species and heavy leaf-litter covering the soil (Fig. 2). The forest, which is irrigated and drained by numerous streams, is very dry in summer, but wet in spring and autumn.

Sarata Monteoru is situated in the central part of Buzau County of Romania. The climatic conditions are characterized as temperate continental with warm to hot days in the summer and high precipitation levels, particularly in spring, but also significant rainfall all year round (ROMANIAN NATIONAL METEOROLOGICAL ADMINISTRATION (2004). The average altitude is 182 m a.s.l. and the slopes have a south-eastern orientation.

Besides Meadow Lizards, the local reptile and amphibian species in the area are: *Lacerta viridis*, *Anguis fragilis*, *Coronella austriaca*, *Natrix natrix*, *Salamandra salamandra*, *Bombina variegata*, *Hyla arborea*, *Bufo bufo*, *Rana dalmatina*, *Pelophylax ridibundus* and *Pelophylax kl. esculentus*. Many of these species have large populations in the area, especially *Bombina variegata* and *Lacerta viridis*.

The populations of *D. praticola*, which are closest to Sarata Monteoru, live in the forests of Snagov near Bucharest City, in a straight line distance approximately 70 km. It is unrealistic to assume that the Meadow Lizard is currently in the process of expanding its distribution range, as typical habitats for this species (forests) have been destroyed, the land being used mainly for agriculture.

On the northeastern limit of its range, but also in Bucharest City, the Wall Lizard *Podarcis muralis* (LAURENTI, 1768) was observed to migrate using anthropogenic habitats and constructions (STRUGARIU et al. 2008; GHERGHEL et al. 2009). However, in case of *D. praticola*, the utilization of anthropogenic habitats for northward migration, such as irrigation canals, is unlikely since irrigation canals are very rare in this area and most of them were destroyed (Fig. 3).

Instead, we suggest that *D. praticola* inhabited the whole region of southern Romania until recent times, as it was covered



Fig. 1: *Darevskia praticola* (EVERSMAN, 1834) specimen seen in the Sarata Monteoru area, Romania.



Fig. 2: Habitat near Sarata Monteoru where the *Darevskia praticola* (EVERSMAN, 1834) specimen depicted in figure 1 was found.

mainly by the forests, which the species prefers. At the end of the seventeenth century, when the deforestation process had begun, the Meadow Lizard took refuge in the remaining smaller patches of forest, such as the location near Sarata Monteoru where we found it. This idea is supported by findings of IFTIME & IFTIME (2006) who regis-

tered this species in the Cozia Massif, and COVACIU-MARCOV et al. (2009b) who observed the species in Jiului George, also situated at the border between Carpathian and Subcarpathian Mountains.

We also propose the inclusion of this area into the Natura 2000 network, taking into account the large number of species

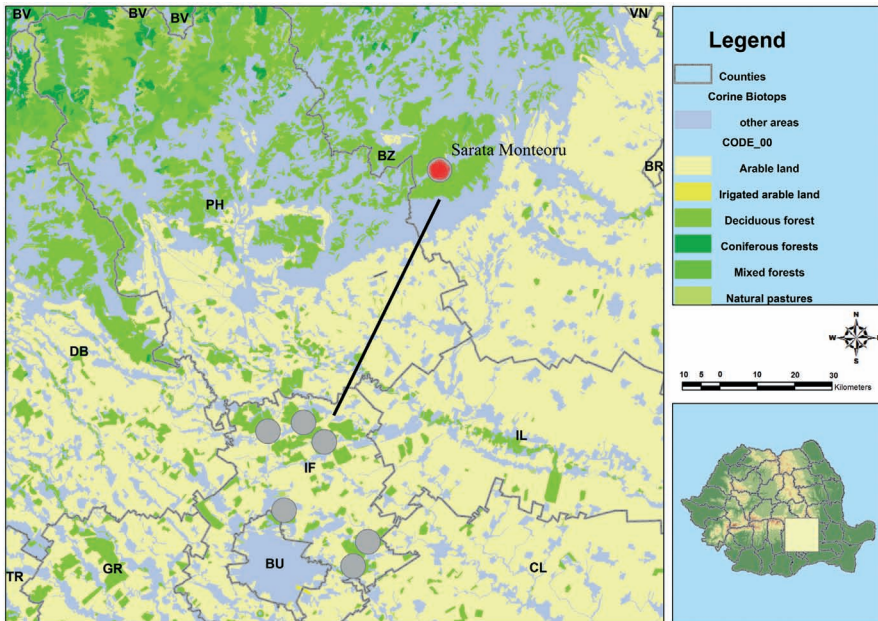


Fig. 3: The new location of *Darevskia praticola* (EVERSMAN, 1834) in the Sarata Monteoru area, Romania, (red dot) and its distance to the nearest known Romanian populations of *D. praticola* (grey dots). Habitat map based on Corine Biotops (ver. 2000) < <http://www.eea.europa.eu/data-and-maps/data/corine-biotopes> >.

present here and listed in Annex II of the Habitats Directive (e.g. *Bombina variegata* and *Hyla arborea*), but also the presence of *D. praticola*.

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