New Herpetological Records from the Danube Delta

Noi semnalări herpetologice din Delta Dunării

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Abstract

Although well-known (e.g. FUHN, 1971; OȚEL, 1992; KOTENKO, 2002; etc.) the herpetofauna of the Danube Delta continues to offer new records, some of them unexpected. Here in we present new distribution records for two species (Pelophylax lessonae and Ablepharus kitaibelli) – the first species being firstly recorded for the Razim-Sinoe complex, the second firstly recorded for the fluviatile Delta – as well as data pertaining to the morphological and chromatic variability in other species (Pelophylax ridibundus, Lacerta agilis, Natrix natrix). Also, the presence of Testudo graeca from Chituc (a very low density, scarcely observable population) was confirmed.

Keywords: Danube Delta, new records, *Pelophylax lessonae*, *Ablepharus kitaibelii*

Introduction

The Danube Delta, as a most important area in terms of biodiversity significance and therefore of conservation interest (see, e.g., GÂȘTESCU, 2009 for the definition, extent and conservation status of the Danube Delta), has been thoroughly studied regarding main systematic groups. The herpetofauna of the Danube Delta is well known (e.g. FUHN, 1971; OȚEL, 1992; KOTENKO, 2002; COGĂLNICEANU *et alii*, 2013 a, b; TÖRÖK, 2013, 2014); however, blanks in the distribution and even presence of some species in the Delta still remain to be filled (TÖRÖK, 2012). Having performed investigations in the Danube Delta on several occasions a side to examination of the collections of the „Grigore Antipa" National Museum of Natural History, provided the opportunity to contribute a few interesting new records to the knowledge of the distribution and intra-specific diversity of the Danube Delta amphibians and reptiles.

Material and methods

Field investigations were performed in September 2004, May 2005 and June 2011 using the visual transects method (see, e.g., COGĂLNICEANU, 1997). Data from the collections of the „Grigore Antipa" National Museum of Natural History (Herpetology collection, inv. nr. 500892, leg. eng. Ștefan Negru at Caraorman on 6.10.1968) were also used.

Results and discussion

New distribution records for two species (*Pelophylax lessonae* and *Ablepharus kitaibelli*) were obtained, a confirmation of the presence of the rare population of *Testudo graeca* at Chituc, as well as data pertaining to the morphological and chromatic variability in other species (*Pelophylax ridibundus*, *Lacerta agilis*, *Natrix natrix*).

Pelophylax lessonae (the Pool Frog). We found several specimens of this species at Enisala in June 2011, in the reed fringe separating Lake Babadag from Razim Lake (Photo 1). It was previously recorded only in the central and southern fluviatile Delta, up to Sfântu Gheorghe, the mouth of the southernmost Danube arm (TÖRÖK, 2013; COGĂLNICEANU *et alii*, 2013a), but not in the Razim-Sinoe complex, or anywhere in Dobrogea except along the Danube and its arms.

Pelophylax ridibundus (the Marsh Frog). While specimens lacking yellow pigment and appearing „blue" or „bluish" are well-known (as an example from our own work, see the figure in IFTIME & IFTIME, 2006), we have encountered in June 2011 at Enisala a specimen showing a gradient in colour from olive-green in the back of the body to bluish grey in the fore (Photo 2), probably to be explained by a partial and gradual diminution of the amount of yellow pigment – a phenomenon somewhat analogous to partial albinism.

Testudo graeca (the Spur-Thighed Tortoise). We found a specimen (Photo 3a, b) in May 2005, in the sandy steppe vegetation of Chituc marine levee, close to Vadu village, at the southernmost end of the Danube Delta and the Biosphere Reserve of the same name, thus confirming the records by TÖRÖK (1997, ap. M. KOHL *in verbis*; 2012, 2014). The tortoise appears to be extremely rare in this area, our record being only the fourth (TÖRÖK, 1997 mentions one field finding, by the above-mentioned M. Kohl, while TÖRÖK, 2012 and 2014 make reference to personal findings in 2009 and 2010) for this relatively well-researched area. While not new, our record suggests the continuity of this population inhabiting a quite different environment (sandy steppe on a marine levee) from most other *T. graeca* populations in Romania.

Lacerta agilis (the Sand Lizard). We found two extremely large specimens (TL ca. 300 mm!), one (Photo 4) in September 2004 in the Sinoe-Grindul Lupilor area (at the limit between the steppic plateau and the sandy levee), and the second (Photo 5) in the Sarichioi village area, in ruderal vegetation along a road, also at the limit between the steppic plateau and the low meadow adjacent to the Razim Lake. These specimens can be clearly distinguished from *Lacerta viridis* by pholidosis, the raport between parietal (paravertebral) lines and the pileus, short hind legs, and/or green belly, but are comparable in size to it. A TL of ca. 300 mm is in the range of *L. viridis* (FUHN & VANCEA, 1961) and above the ca. 230 mm TL given as maximum for *L.*

agilis by TÖRÖK (2008); however, the maximum of 278.38 mm given by GHIURCĂ & ROȘU (2010) in *L. agilis* from Măcin[1] is comparable to our specimens. Our large *L. agilis* specimens are found at the contact zone between steppe and deltaic levees and show colour intermediate between the „*euxinica*" morph and typical *L. a. chersonensis* – i.e. either wholly brownish but with a dorsal yellowish-green tinge (Photo 4), or brilliant green all over except for a brownish tinge in the dorsal band and posterior part of the body (Photo 5). This is consistent with TÖRÖK (2008) who found no consistent traits that would discriminate „*euxinica*" from *L. a. chersonensis*, and also with KOTENKO (2002), GHERGHEL & STRUGARIU (2009) and GHIURCĂ & ROȘU (2010) who record great variability in *L. agilis* from Dobrogea.

Ablepharus kitaibelii (the European Copper Skink).The examination of the material from the collections of the „Grigore Antipa" National Museum of Natural History (Herpetology collection, inv. nr. 500892, leg. eng. Ștefan Negru at Caraorman on 6.10.1968) revealed that it consists of six small lizards (none fully grown): three *Ablepharus kitaibelii*, two *Lacerta agilis* and one *Eremias arguta* (Photo 6). The record of *A. kitaibelii* at Caraorman is remarkable as it is the first in the fluviatile Delta; the species is known from forested areas in the adjacent northern Dobrogea mainland (COGĂLNICEANU *et alii*, 2013b). The fact that *A. kitaibelii* is accompanied in this sample by two species (*L. agilis* and *E. arguta*) that are typical for the Caraorman area (*E. arguta* not being found together with *A. kitaibelii* in any other part of its range) argues for the correctness of the label and the presence (at least up to 1968...) of *A. kitaibelii* in Caraorman forest, where *A. kitaibelii* finds a favourable habitat of old-growth oak stands, rarely or never flooded (Roșca, V., pers. comm.) while *E. arguta* and *L. agilis* can be found in the nearby sandy areas. Thus, the record of *A. kitaibelii* from Caraorman appears valid and should be followed up for the survival of the population.

Natrix natrix (the Grass Snake). We have found in June 2011, in Enisala, a specimen lacking almost entirely the characteristic black and white (or yellow) „collar" marks. It showed a somewhat muted „*persa*" – like pattern with barely distinguished light longitudinal bands on a brownish background (Foto 7). This adds to the already known variability of *N. natrix* in the Danube Delta (see, e.g., KOTENKO, 2002).

[1] TÖRÖK (2009) found no *L. agilis* in the Măcin Mountains, which cautions against the find of GHIURCĂ & ROȘU (2010) as a possible confusion with *L. viridis* females. However, TÖRÖK (1999) concluded that there are no *L. agilis* at all in Dobrogea outside the Delta and Razim-Sinoe Complex, a conclusion overturned by the same researcher ten years later (TÖRÖK, 2008, 2009). *L. agilis* in main land Dobrogea is very localized and elusive.

Conclusions

Our findings enlarge the distribution area of *Pelophylax lessonae* and *Ablepharus kitaibelii*, confirm the presence of a *Testudo graeca* population at Chituc and add to the known range of intraspecific variation in the widespread, variable species *Pelophylax ridibundus*, *Lacerta agilis* and *Natrix natrix*. All of this constitutes a widening of the knowledge of the herpetofaunistical biodiversity of the Danube Delta; the records of *A. kitaibelii* and *T. graeca*, rare species which are strictly protected by law, are significant for conservation.

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Photo 1. *Pelophylax lessonae* from Enisala, identifiable by bright yellow coxal marbling and large, spade-shaped metatarsian tubercle, visible in the shade on the right foot. Photo by Al. Iftime

Photo 2. *Pelophylax ridibundus* specimen from Enisala showing colour gradient from olivaceous to nearly blue. Photo by Oana Iftime

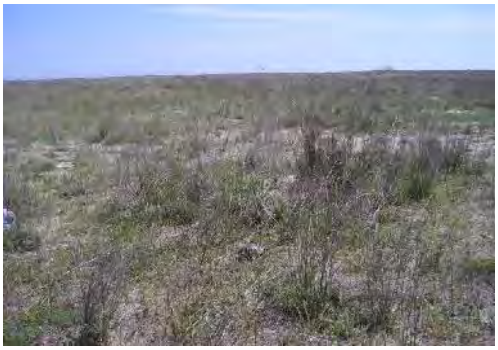
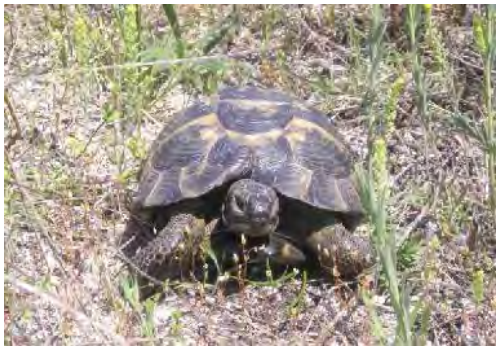

Photo 3a, b. *Testudo graeca* in the sandy steppe of Chituc levee. Photos by Al. Iftime.

Photo 4. Large *L. agilis* specimen from Sinoe – Grindul Lupilor. It can be differentiated from *L. viridis* females by pholidosis (e.g. rostral scale does not touch the nostril), the fact that the dorsal band, including the flanking light parietal lines, is narrower than the pileus at the contact with it, and the short hind limbs. Photo Al. Iftime

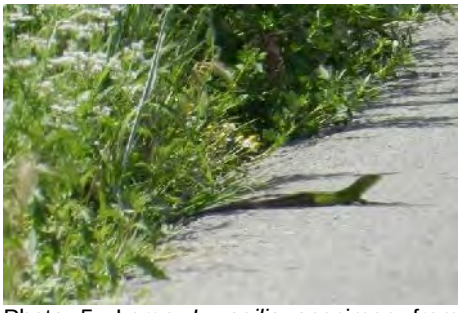

Photo 5. Large *L. agilis* specimen from Sarichioi. It can be differentiated from *L. viridis* by the green underbelly and throat (in a *L. viridis* these should have been yellow and blue, respectively, in a breeding male in June) and the short hind limbs.
Photo by Al. Iftime

Photo 6a, b. Material collected by Șt. Negru at Caraorman in 6.10.1968, showing specimens of *Ablepharus kitaibelli, Lacerta agilis* and *Eremias arguta*. Photos by Al. Iftime

Photo 7. *Natrix natrix* from Enisala. The “collar” as well as the longitudinal bands are present, but extremely faint. Photo by Al. Iftime