

NEW RECORDS OF REPTILES (REPTILIA, SQUAMATA) AT AZOV SEASHORE OF TAMAN' PENINSULA (KRASNODAR KRAY, RUSSIA)

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For the first time at Azov seashore of Taman' peninsula (settlement Golubitskaya and west of Peresyp' village) there were found populations of meadow lizard *Darevskia praticola pontica* (Lantz et Cyren, 1919). The lizards live in the lower parts of a high shore slope with a phryganoid vegetation. The density of their population can reach 1 individual per square meter (1 individual per 1 m²), and in the places of their concentration — 5 and more individuals per 1 m². In second place, in the upper parts of the shore slope near village Peresyp' the glass lizard, *Pseudopus apodus* (Pallas, 1775) was also found. New records of these species are separated for 30 km to the east and 70 km to the south correspondingly from previously known localities. The runner, *Elaphe sauromates* Pallas, 1814, which has not been found earlier in the Eastern Azov area, is not rare in the Akhtanizov estuary region.

Keywords: Reptilia, distribution, Taman' Peninsula, Krasnodar kray, *Darevskia praticola*, *Pseudopus apodus*, *Elaphe sauromates*.

The herpetological fauna of Taman' Peninsula, a part of the Eastern Azov area, does not attract as much attention of herpetologists as the herpetological fauna of submountain and mountain parts of Krasnodar kray, where the diversity of species is higher.

To the present day (Zinaykova and Plotnikov, 1989) only six species of reptiles were known to occur in the Eastern Preazov Area (steep part of Krasnodar kray): *Emys orbicularis*, *Lacerta agilis*, *Eremias arguta*, *Natrix natrix*, *N. tessellata*, and *Hierophis caspius*. These authors suppose that *Emys orbicularis*, *Eremias arguta*, and *Natrix natrix* are common, *Lacerta agilis* abundant, and *Hierophis caspius* has become rare in Eastern Azov Area. Later (Plotnikov, 2000) on the hills of Gulf of Taman' shores *Pseudopus apodus* was recorded. However this species was not observed on the shores of Azov Sea. It is necessary to note that *Pseudopus apodus* in Crimea inhabits the northern and eastern coast of the Kerch' Peninsula, i.e., region adjacent to the Azov coast. At the same time *Darevskia praticola* and *Elaphe sauromates* are not mentioned in the papers cited above. The data about the record of *Podarcis tauricus* on Taman' Penin-

sula (Terentjev and Chernov, 1949; Szczerbak, 1962) were not confirmed afterwards (Lukina, 1964; Szczerbak, 1966). Recently the paper of Tuniyev and Tuniyev (2004) was published. The authors recorded *Emys orbicularis orbicularis*, *Eremias arguta deserti*, *Lacerta agilis exiqua*, *Darevskia praticola pontica*, *Coluber caspius*, *Natrix natrix scutata* and *N. tessellata*. *D. praticola* was found only in the vicinity of Vityazevo settlement.

In this paper the new data on the distribution of three species of reptiles in this region is presented.

MATERIAL AND METHODS

The survey of the Taman' Peninsula was undertaken by the first author during several years (1995 – 2002). The part of the coast near mountain Tizdar was surveyed twice in May 1997 and 2001. The outermost western part of the peninsula near capes Kamenny and Akhilleon, with appropriate biotopes, was noticed in September 1995, but due to inconvenient weather conditions the actual survey was not undertaken there.

18 specimens of meadow lizard were collected in May 2001 in the Za Rodinu village (Temryuk region, 80 km north of Anapa) on the northern slope of a steep of Azov Sea. Sample (R-10924 ZMMU) includes 14 males (9 adults, 5 subadults) and 4 females (3 adults and

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Fig. 1. New records of lizards on Taman' Peninsula: red circle, *Darevskia praticola*; black circle, *Pseudopus apodus*.

1 subadult). The standard measurements were taken: body length (SVL), tail length (L.cd.), number of granules between the supraoculars and the supraciliaries (Gran.), number of scales along the mid line of the throat to the collar (G), number of midbody scales (Sq.), number of ventrals between collars and the last complete row (Ventr.), number of femoral pores (P.fm.).

RESULTS

Meadow lizard was found in the narrow zone of the Azov coast west of village Peresyp' and near Golubitskiy Lighthouse (Fig. 1). The nearest population of the meadow lizard is noted about 30 km away from the new location (the lowlands of Kazaki village on Kuban' River).

In both cases the coast areas are high (up to 74 m, Tizdar Mt.), compiled of clay sands and loamy soils. To the west of Peresyp' village the coast is stepped and/or partially steep, and turned to the north-north-east (Fig. 2). The vegetation is of a phryganoid type, with low set, dense and compact crowns of trees and bushes, which covers up to 30% of land: *Elaeagnus angustifolia* L.), *Crataegus* sp., *Rosa canina* L., *Lycium barbarum* L., sometimes *Tamarix* sp. and *Populus* sp. The grass is

spare and low (up to 30 cm) at the upper part of the hill and thick at the lower part, up to 120 cm height. At outlets of ground waters it is up to 250 cm (*Phragmites australis*). At the upper and convex slopes grain-wormwood groups with ephemeroids prevail: *Artemisia taurica*, *Festuca* sp., *Iris pumila*, etc. Herbs-grain groups are typical for middle and lower parts of the hill: *Agropyron cristatum*, *Poa* sp., *Cynodon dactylon*, *Juncus* sp., *Arum* sp., *Potentilla canescens*, *Caucalis* sp., *Astrodaucus* sp., *Papaver* sp., etc. In addition, there exist steep and sliding surfaces with pioneering and ruderal groups of vegetation as well as a surf line.

This part of the coast is well protected from the south and south-west winds typical for Taman'. A relative safety and presence of outlets of light mineralized ground waters provide exceptional mesophytic features in this part of Taman' region. The maximal extension of landscape with same biotopes along the coast is about 20 km.

Meadow lizard prevail in lower part of the coast slope, its population density gets up to 1 individual per 1 m². Around butts of trees, fallen trunks and stumps it reaches 5 and more individuals per 1 m².

The found population of *D. p. pontica* is located in the outermost west of the Russian part of area. The main characters are as follows (Table 1).



Fig. 2. Biotope of *Darevskia praticola* and *Pseudopus apodus* on the Azov coast.

According to Table 1 our specimens are similar morphologically to those from other populations of Krasnodar Territory excluding southern (vicinity of Adler) population. Adler population has specific morphological characters (Orlova, 1978). The color pattern is typical for *D. praticola*.

Pseudopus apodus was found on the shore of Azov Sea together with *D. praticola* to the west of Peresyp' village. It is the second record of this species in the East Preazov area. It occurs there at the upper parts of slopes. Population density is about 2 – 3 individuals per 1 ha. During excursions 1 – 3 specimens per 1 km² were recorded. In the adjacent regions it is distributed along Black Sea shore of the Caucasus within Krasnodar kray (Su-Psekh, Gaykodzor, and Raevskaya settlements) and Abkhazia, and in Crimea including Kerch' Peninsula.

Elaphe sauromates is a new record for Taman' Peninsula and the Eastern Preazov area. It occurs along shores of Akhtanizov estuary. One dead specimen was found on a road between Dzhiginka and Belyy farm. On the Black Sea shore the runner is found in Gelendzhik suburbs (southern part of Markhotskiy ridge), in the middle and upper parts of the range (Plotnikov, 2000), and in the foothills of Severskiy region (Bannikov et al., 1997; Tuniyev, Nilson, 1995).

Other species typical for the Eastern Preazov area including *Emys orbicularis*, *Eremias arguta*, *Lacerta agilis*, *Natrix natrix*, *N. tessellata*, and *Hierophis caspius*, were registered. All these species, including *Hierophis caspius*, are quite common. They mainly inhabit badlands and areas near water bodies. *Hierophis caspius* occurs everywhere in the territory of the peninsula: along the coast of Ahtanizov, Kizyltash, and Vityazevo

TABLE 1. Morphological Characters of *Darevskia praticola* from Taman' Peninsula

| Sex, age | SVL | L.cd. | SVL/L.cd. | Ventr. |
|-----------------|-----------------------------|----------------------|---------------------|---|
| Males adults | <i>n</i> = 9 | <i>n</i> = 5 | <i>n</i> = 5 | <i>n</i> = 14 |
| | 46.0 – 52.0 47.64 ± 0.79 | 86.0 – 104.0 92.5 | 0.46 – 0.53 0.50 | 24 – 26 25.07 ± 0.16 |
| Males subadults | <i>n</i> = 5 | <i>n</i> = 3 | <i>n</i> = 3 | |
| | 33.0 – 40.3 37.86 | 75.0 – 79.0 77.67 | 0.48 – 0.52 0.50 | |
| Females adults | <i>n</i> = 3 | <i>n</i> = 1 | <i>n</i> = 1 | 3 female adults, 1 subadult (<i>n</i> = 4) |
| | 52.3 – 55.5 53.83 | 78.3 | 0.71 | |
| | Sq. | G | P.fm. | Gran. |
| Males + females | 33 – 37 | 15 – 18 | 10 – 13 | 4 – 13 |
| | 35.29 ± 0.33 | 16.44 ± 0.20 | 11.28 ± 0.21 | 7.44 ± 0.54 |

estuaries, between Taman' and Senniy settlements, between Yantar' and Zheleznyy Rog Cape, and in other parts. Earlier only two records were known: near Temryuk and the coast of Taman' Gulf between Sennaya station and Primorskiy settlement (Plotnikov, 2000).

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