

Further Remarks on the Amphibians and Reptiles of Afghanistan

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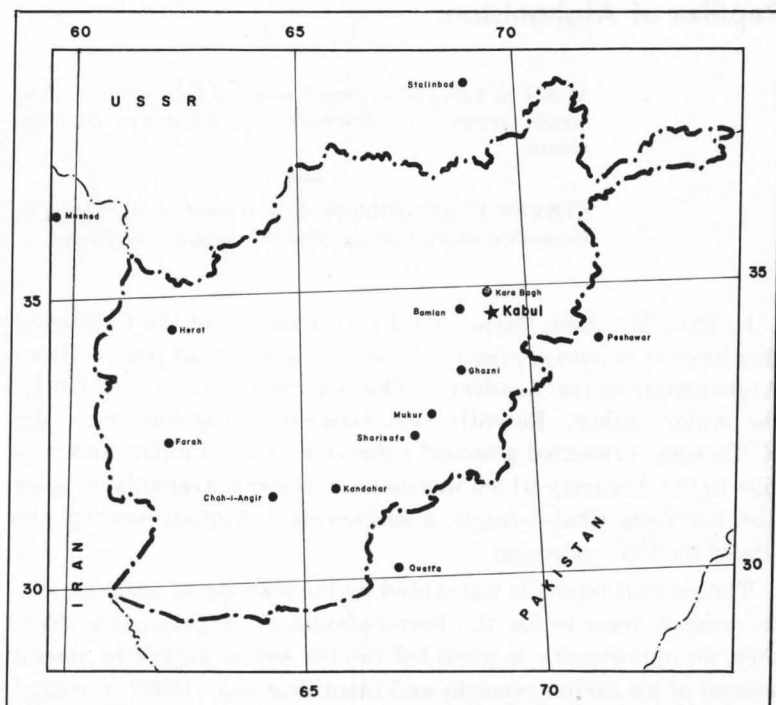
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In 1950, Mr. John Gasperetti, Field Associate of the California Academy of Sciences, presented a small collection of reptiles from Afghanistan to the Academy. This was reported on in 1959 by the senior author. Recently, Mr. Gasperetti, together with Mr. R. Troeger, presented a second collection of amphibians and reptiles to the Academy which was made in eastern Afghanistan some distance from Chah-i-Angir, a southcentral Afghan locality, the site of the first collection.

The present report is warranted by the scarcity of accurate distributional records for the herpetofauna of Afghanistan. Further, an opportunity is provided for the senior author to amend several of his earlier remarks and identifications (1959), the need for which was brought to his attention by Dr. Sergius Chernov of the Institute of Zoology, Academy of Sciences, Leningrad, to whom he is indebted.

The following species are represented in the recent Gasperetti donation: *Bufo viridis*, *Gymnodactylus scaber*, *Agama agilis*, *Phrynocephalus scutellatus*, *Eremias guttulata watsonana*, *Eremias velox persica*, *Coluber ravergeri*, and *Testudo horsfieldi*. All but *P. scutellatus*, *C. ravergeri*, and *T. horsfieldi*, were taken between 50 and 90 kilometers northeast of Kandahar, in the vicinity of Sharisafa and Mukur. Both of these villages are located close by the Tarnak River at altitudes between 1300 and 1400 meters.

Phrynocephalus scutellatus, *C. ravergeri*, and *T. horsfieldi* were taken at the village of Kara Bagh which is located about 35 kilometers north of Kabul at an altitude of about 2200 meters (see map, figure 1). The collections were made during February, March, and April of 1961.



AFGHANISTAN

FIGURE 1. Map of Afghanistan showing principal collecting sites mentioned in text.

Family BUFONIDAE

Bufo viridis Laurenti.

MATERIAL EXAMINED (17): Sharisafa (CAS 90761, 90778); Mukur (CAS 90779–90793).

Smith (1940, p. 383), recorded this toad from Bāmiān, Pagh-

man, and Doab, in eastern Afghanistan to the west of Kabul, at altitudes in excess of 7,000 feet. He noted that females taken at Paghman, a small village about 22 kilometers northwest of Kabul, in the month of June contained ripe ova. Among the specimens at hand, individuals collected in mid-March and early April also contained ripe ova.

Family GEKKONIDAE

Gymnodactylus scaber (Heyden).

MATERIAL EXAMINED (1): Sharisafa (CAS 90767).

Annandale recorded a single specimen of this species from "Afghanistan" (1913, p. 315). Mr. Gasperetti secured a second specimen on March 3, 1961, which appears to be the first documented specimen from the country. It is a male, 40 mm. in standard (snout-vent) length; tail length 50 mm.; preanal pores 6.

Family AGAMIDAE

Agama agilis Olivier.

MATERIAL EXAMINED (9): Sharisafa (CAS 90762–90763, 90769, 90773–90775); 90 km. NE of Kandahar, near Tarnak River (CAS 90765–90766); 75 km. NE of Kandahar, on Tarnak River (CAS 90777).

Comparison of samples of this species from Iran, from the Dasht-i-Margo Desert and from northeast of Kandahar reveals a decided difference in the number of scales around the body. Fifty-eight specimens from Iran average 86.1 scale rows (range 76–95); six individuals from the Dasht-i-Margo average 74.8 rows (range 72–76); and the nine individuals of the northeast Kandahar sample average 65.0 rows (range 60–74). It is clear that these differences are statistically significant, but lack of adequate samples from other areas prevents a taxonomic assessment of the differences. For this reason we do not accept Wettstein's subspecific subdivisions (1951, p. 433).

The Kandahar specimens are somewhat smaller than those from the lower altitudes in Afghanistan and Iran which we have seen. This may be attributed to a temperature-growth rate cline rather than any genetically fixed difference. It seems obvious that *Agama agilis* is a polymorphic species. It should be closely studied before

any attempt is made to accord its several geographical populations taxonomic recognition.

TABLE I
Measurements (in mm.) and counts for specimens of Agama agilis

CAS number	Sex	Standard length	Tail length	Scale rows	Upper labials	Preanal pores
90762	♂	82	— ¹	61	16	24
90763	♂	70	109	60	16	17
90765	♀	72	110	74	18	9
90766	♀	83	111	63	17/18	0
90769	♂	68	—	67	16/17	18
90773	♀	80	116	69	19	6
90774	♂	72	115	67	18	23
90775	♀	83	115	62	18/17	0
90777	♀	85	119	62	15/17	6

1. Tail damaged.

Phrynocephalus scutellatus (Olivier).

MATERIAL EXAMINED (3): Kara Bagh (CAS 90794, 90796–90797).

One of the two females, collected on April 8, was gravid. The largest of the ovarian eggs measured 2.5 mm. in diameter.

According to the definition of the genus *Phrynocephalus* preanal pores are absent. Among the specimens we examined, preanal pores, or at least obviously “glandular” preanal scales were strongly developed. These “glandular” scales were clustered in the preanal region though other similar scales were found scattered randomly on the posterior half of the venter and on the undersides of the thighs. Whether the cluster of modified scales found in the preanal region is homologous with the defined preanal scales known in other genera of agamid and other lizards is not known.

TABLE II
Measurements (in mm.) and counts for specimens of Phrynocephalus scutellatus

CAS number	Sex	Standard length	Tail length	Scale rows		Preanal pores
				Dorsal	Ventral	
90794	♂	43	61	126	42	26 +
90796	♀	39	52	112	42	36 +
90797	♀	36	62	128	45	50 +

Family LACERTIDAE

Eremias guttulata watsonana Stoliczka.

MATERIAL EXAMINED (9): 40 km. northeast of Kandahar, on Tarnak River (CAS 90757); 50 km. northeast of Kandahar, on Tarnak River (CAS 90758); 55 km. northeast of Kandahar, on Tarnak River (CAS 90759–90760); Sharisafa (CAS 90764, 90768, 90770–90771, 90776).

A single specimen was collected by Gasperetti in 1950. It was reported on by Leviton (1959) who stated at the time, "No pre-anal or femoral pores are present." This was in error inasmuch as 13 femoral pores are present on each side.

Mr. Gasperetti obtained nine specimens of this species in 1961 along the Tarnak River. They were collected between February 19 and March 7. Three of the four females, taken February 21–March 7, were gravid; one female collected March 7 did not contain eggs.

TABLE III
Measurements (in mm.) and counts for the sample of
Eremias guttulata watsonana

CAS number	Sex	Scale rows Dorsal	Upper Ventral	Upper labials	Femoral pores	Standard length	Tail length
90757	♂	39	10	8	12/11	52	— ²
90758	♂	44	10	9	11/10	51	105
90759	♂	43	10	10	13	51	—
90760	♀	42	10	9	12	50	—
90764	♂	44	10	8	12	49	—
90768	♀	46	10	8	13/14	50	80
90770	♀	45	10	9	12	55	111
90771	♀	46	10	8	12/11	50	89
90776	♂	46	10	9	13	50	—

2. Tail damaged.

Eremias velox persica Blanford.

MATERIAL EXAMINED (1): Sharisafa (CAS 90772).

A single specimen was collected by Gasperetti about 150 kilometers southwest of Ghazni from where Smith recorded one of his two specimens (1940, p. 384). Ours is a gravid female collected March 6, 1961. The three specimens noted here are the only docu-

mented Afghan records, though Alcock and Finn obtained a specimen of "*Eremias velox*" at Panjpai (near Quetta) in Baluchistan near the Baluch-Afghan border.

Counts and measurements (in mm.) are as follows: standard (snout-vent) length 83; tail length 154; dorsal scales 60; ventral scales 14; upper labials 11; femoral pores 21/21.

Family BOIDAE

***Eryx tataricus* Lichtenstein.**

In 1959, the senior author reported on a specimen of *Eryx jaculus miliaris* from the vicinity of Chah-i-Angir. Dr. Sergius Chernov subsequently examined the specimen, CAS 84638, which he reidentified as *E. tataricus* after comparing it with material at his disposal.

The following key, adapted from Terentjev and Chernov (1949, pp. 216-217) should permit identification of all the species of *Eryx* either presently known from Afghanistan or likely to be found there.

- 1a. Scale rows around body 41 or less *E. elegans*
- 1b. Scale rows around body 43 or more.
 - 2a. Width of interorbital space considerably greater than distance from posterior edge of eye to corner of mouth; front and upper surface of snout slightly convex; second upper labial usually higher than the third; ventrals without spots, or with widely separated dark spots *E. jaculus*
 - 2b. Width of interorbital space equal, less than, or slightly greater than distance from posterior edge of eye to corner of mouth; front and upper surface of snout not convex; second upper labial usually lower than third; ventrals, as a rule, with dark, confluent spots.
 - 3a. Width of interorbital space considerably less than the distance from the posterior edge of eye to corner of mouth; eyes directed upward; scales on tail smooth or with scarcely detectable keels *E. miliaris*
 - 3b. Width of interorbital space equal, slightly less than, or slightly greater than distance from posterior edge of eye to corner of mouth; eyes directed laterally; scales on tail with prominent keels.
 - 4a. Scales of body smooth, those on tail and on sides near anal region keeled; no distinct bands on body or tail but dark blotches and irregular markings present
..... *E. tataricus*

- 4b. Scales of body and tail more or less distinctly keeled;
a series of distinct dark bands on tail and sometimes
on body, especially evident posteriorly.....*E. johnii*

Family COLUBRIDAE

***Coluber ravergieri* Ménétries.**

MATERIAL EXAMINED (1): Kara Bagh (CAS 90798).

Smith (1940, p. 384) recorded a specimen from Bāmiān about 130 kilometers northwest of Kabul, at an altitude of 7,000 feet. Our specimen, the second to be reported from Afghanistan, was also taken at an altitude of about 7,000 feet. It agrees closely with Smith's description of the species (1943, p. 172).

Counts and measurements (in mm.) are as follows: Sex ♂; standard (snout-vent) length 273; tail length 72; scale rows at midbody 21; ventrals 199; subcaudals 87; 3 pre- and 2 postoculars; 9 upper labials, fifth and sixth border orbit; 64 black blotches on dorsum.

***Coluber rhodorachis ladacensis* (Anderson).**

In 1959, the senior author listed seven specimens under *Coluber karelini*. Dr. Chernov of Leningrad examined these and provided the following identifications after comparison with his material:

<i>Coluber r. ladacensis</i>	CAS 84634-84636
<i>Coluber karelini</i>	CAS 84630-84633

The specimens identified as *C. r. ladacensis* have rectangular black bars on the dorsum which alternate with ventrolateral black blotches. The ventrals range from 221-228. Those identified as *C. karelini* are gray, the margins of many scales black forming a very dark region on the anterior fifth of the body and narrow, irregular crossbars one scale row wide posteriorly; the ventrals range from 202-211 (see description of color form II in Smith, 1943, p. 169).

Family TESTUDINIDAE

***Testudo horsfieldi* Gray.**

MATERIAL EXAMINED (2): Kara Bagh (CAS 90799-90800).

Two young specimens were collected by Mr. Troeger, companion

to Mr. Gasperetti in his work in Afghanistan. The animals arrived alive in San Francisco and were kept for two months in a terrarium. Their measurements (in mm.) are as follows: Length of carapace 46.1, 43.8; width of carapace 44.7, 42.8; length of plastron 41.5, 39.2; width of plastron 39.5, 37.3.

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