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**A Checklist of the Amphibians and Reptiles of Afghanistan*
Exploring Herpetodiversity using Biodiversity Archives**

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The composition and distribution of the vertebrate fauna of Afghanistan remain poorly documented and in recent decades little new data have become available due to a series of wars and the resulting unstable security conditions. As Afghanistan returns to some semblance of normalcy, baseline faunistic data will be particularly important for establishing national conservation priorities as well as for placing Afghan taxa into their broader phylogenetic and zoogeographic contexts. We here provide an updated checklist of the herpetofauna of Afghanistan based in part upon biodiversity archives of specimen records from several museum and private collections as well as literature references and field research. The herpetofauna of Afghanistan consists of 118 species and subspecies belonging to 58 genera and 21 families. Seven species are endemic to the country, whereas 18 taxa have to be deleted from previous lists of the Afghan herpetofauna. Afghanistan’s primary zoogeographic relationship to the Palearctic Region is reaffirmed but with secondary influence from the Oriental Region. Immediately following the checklist, two sections provide information about species probably occurring in Afghanistan and previously mentioned species that are now recognized as absent.

KEYWORDS: Amphibia, Reptilia, Checklist, Central Asia, Southwest Asia, Afghanistan.

Afghanistan is, without doubt, one of the most challenging countries in the world in which to collect faunistic data. Yet such data are critical for scientific research regarding not only nature conservation but especially zoogeography and, therefore, also systematics. Following the zoogeographic definitions of Kreft and Jetz (2010), the country lies at the border between three important large-scale zoogeographic regions: the Oriental, African *s.l.*, and Palearctic. It is the aim of this study to present a revised checklist of the amphibians and reptiles, including distributions of the respective species, for further herpetogeographical research and conservation in this country. After four decades of more or less continuous war, field research in the country is now possible, but remains difficult. Therefore, we used “biodiversity archives”, i.e., museum and private collections as well as literature resources, to compile a comprehensive checklist of species known from

* This contribution is dedicated to Clas M. Naumann, former Director of the Museum Koenig, in recognition of his many exceptional contributions to our knowledge of the Afghan fauna and his enthusiasm for this extraordinary country.

Afghanistan. This underlines the importance of museum collections as data resources for politically unstable areas and demonstrates that systematic and biogeographic research can progress, even if field work is not possible.

PHYSIOGRAPHY.— Afghanistan has an area of about 652,090 km² (National Geographic Society 2011) and it is, therefore, slightly larger than France. It lies roughly between latitudes 30°25' and 38°31'N and longitudes 60°45' and 72°00'E, but a finger-like projection, the Wakhan Corridor, extends northeast to 74°51'E. Afghanistan is bordered to the north by Turkmenistan, Uzbekistan and Tadjikistan, to the east and south by Pakistan, to the west by Iran, and at the far east of the Wakhan Corridor by China (Fig. 1).

Geographically, the lower elevational parts of Afghanistan, together with Balochistan in Pakistan, constitute the easternmost extension of the Iranian Plateau. This geological unit rises between the Indus River Valley in the east, the Tigris River Valley in the west, and the Amu Darya (Oxus River) in the north, and is bordered by the Zagros Mountains of southwestern Iran and by the Gulf of Oman and Arabian Sea to the south and southeast, respectively. The Caucasus Mountains are the northwestern-most extension of this plateau. The mountains of Western and Central Afghanistan, e.g., Paropamisus and the Hindu Kush, link the plateau with the Pamir and the Himalayas. Northern Afghanistan, north of the Hindu Kush and south of the Amu Darya, is an extension of the Central Asian steppe. Afghanistan can, therefore, be generally characterized by three major topographical regions: (1) the Central Hindu Kush range with its outliers the Paropamisus and Koh-i-Baba; (2) the barren and rugged foothills of these ranges; and (3) the lower steppes and deserts.

The highest elevations are in the Wakhan Corridor (between 6000 and 7500 m), with the highest mountains between the west end of the Wakhan and the beginning Hindu Kush. Here, Mount Noshak (7485 m) and the nearby Pakistani Tirich Mir (7708 m) are the highest peaks and the Hindu Kush range declines to the Salang Pass (3627 m) north of Kabul and disappears between 1000 and 500 m in the northwest and the low plains and deserts in the southwest. The Hindu Kush continues to western (Paropamisus Mountain Range) and Central Afghanistan (Koh-i-Baba), with peaks as high as 5090 m. Approximately 27% of the country lies above 2,500 m elevation (UNEP 2003).

Major rivers of southern and southwestern Afghanistan (e.g., the Helmand, Khash, Farah and Harud Rivers) have no outlet to the sea and flow into a desert depression of a former lake bed known as Sistan at the Afghan-Iranian border area. The largest rivers of northwestern Afghanistan (Murghab, Hari Rud) end in the sands of the Kara Kum desert in Turkmenistan. An exception is the Amu Darya (Oxus River) system in northern and northwestern Afghanistan. It originates in the Wakhan region, receiving as tributaries the Kunduz and Kokcha Rivers, and finally flows into the Aral Sea. The Kabul River of eastern Afghanistan, and its tributaries, the Alingar and Kunar Rivers, drain through a geologically complicated mountain range (Safed Koh) in Nuristan and finally empty into the Indus in Pakistan.

CLIMATE.— Afghanistan has a semi-arid to arid continental climate, characterized by hot summers and cold winters with large daily and seasonal temperature fluctuations. The magnitude of these characteristics is influenced by four main factors (Hassinger 1968): (1) High plateaus in eastern Afghanistan and the high mountains of the Hindu Kush and Wakhan that have permanent snow and ice; (2) Indian monsoons, which extend to about 30 km west of Kabul; (3) desiccating winds, e.g., the 'hot and dry wind of 120 days', which blow between May and September from Herat across the Sistan Basin; and (4) the Kara Kum, Jalalabad, and Sistan Basins with sporadic rainfall (up to 250 mm per year), mean January temperature just above freezing and a mean July temperature above 32°C. Moreover, riparian vegetation and oases have an influence on microclimate such that in the height of summer they can have ambient temperatures three degrees cooler than those in the surrounding deserts or steppes.

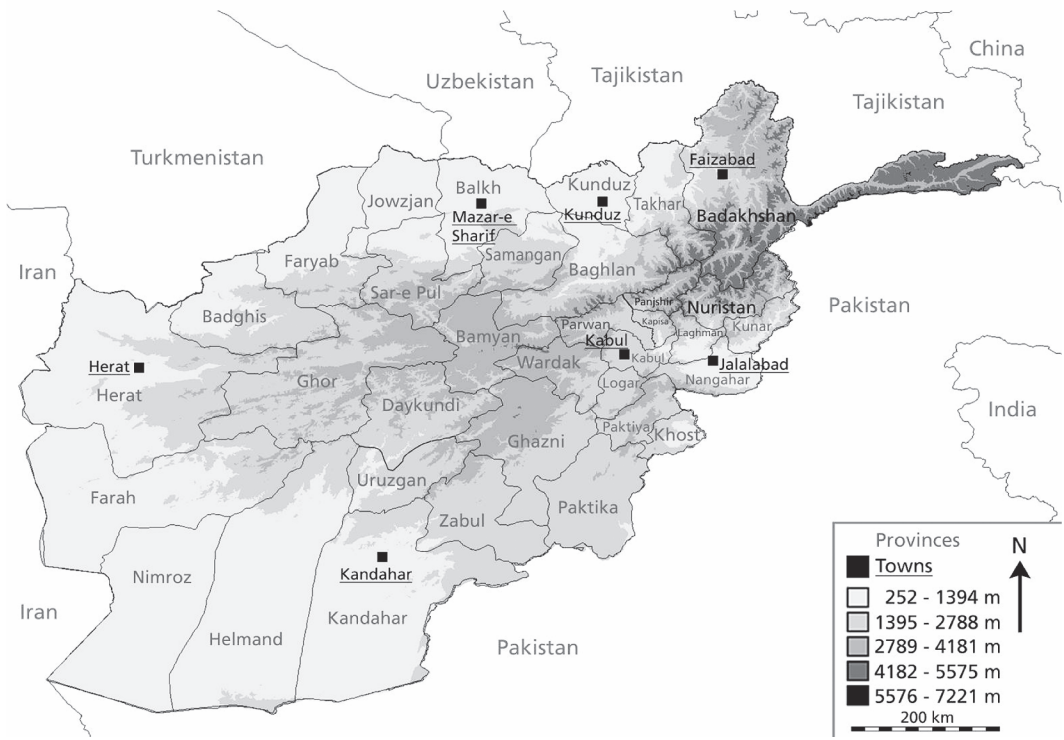


FIGURE 1: Map of Afghanistan, showing major towns and provinces.

Stenz (1946) recorded a mean temperature at Kabul (1790 m, 13-year record) of 11.5°C with a mean minimum of 3.8°C and a mean maximum of 19.6°C. Within these 13 years the absolute limits of variation were between -25.8°C and 37.7°C, resulting in a range of 63.5°C. Generally, the coldest temperatures in Afghanistan are found in the Wakhan region (-17.2°C mean temperature for the coldest month) (Stenz 1946). North and South Afghanistan are equally hot, with 33°C at Girishk (South Afghanistan) and 32°C at Termiz (Uzbekistan near the northern Afghan border) as mean temperatures for the hottest month (July) (Hassinger 1968).

Precipitation is markedly seasonal with almost none during summer and mainly snow during the winter and early spring. Snow is also the source of most of Afghan surface water (UNEP 2008). However, precipitation is also influenced by elevation with the highest at Salang (3,366 m a.s.l.) and the lowest at Farah (700 m a.s.l.) (UNEP 2008).

VEGETATION.— Most of the Afghan fauna and flora is of Eurasian origin, whereas Pakistan is dominated by species of the Indo-Malayan Realm (UNEP 2008). Some of these elements have dispersed to Afghanistan and even the lower Kabul Valley is considered to be part of the Indo-Malayan “Indus-Ganges Monsoon Forest” Province (UNEP 2008). Twelve eco-regions of four biomes are present in the country and five of these regions are considered as critically endangered (Olson et al. 2001, Fund 2012, Wagner 2014a, b). The Afghan flora has been affected by people and their livestock for thousands of years and there is virtually no part of the country, apart from high alpine areas, that has not suffered anthropogenic impacts (UNEP 2008). Freitag (1971) suggested that under natural conditions Afghanistan would be dominated by oak woodlands. Today, the largest expanses of dense vegetation are the forests along the Kunar-Nuristan border, whereas in other parts of the country dense vegetation is limited to watercourses and cropland. Moderately

dense vegetation can be found in the central and northern Hindu Kush, whereas the rest of the country is sparsely vegetated (UNEP 2008). The eastern part of the country has monsoon-influenced forests, whereas extensive deserts can be found in southwestern areas.

HISTORY OF AFGHAN HERPETOLOGY.—Research on the Afghan herpetofauna began with Boulenger (in Aitchison 1889) and Alcock and Finn's (1897) "Afghan Boundary Commission" publication and several other works of this time. A second period of intensive research started with Smith (1940) who was followed by Knut Lindberg from Sweden who traveled several times (1947, 1957–60, 1962) to Afghanistan and collected material that was later partly published in a series of papers with the title "Contribution à l'étude de la faune d'Afghanistan" (see, e.g., Pisarski 1967, Wettstein 1960). At the same time, Alan Leviton (1959) reported on a reptile collection from Chahi-Angir (Dasht-i-Margo Desert) made by John Gasparetti in 1950, and this was followed by several additional field studies until 1970. Prior to these works, references to Afghan amphibians and reptiles were to be found in a number of more general publications (e.g., Günther 1864, Boulenger 1890, 1921, Smith 1945, Terent'ev and Chernov 1949) and a few expedition reports (e.g., Murray 1892). For a complete bibliography see Leviton and Anderson (2010, 2012, 2013) and Appendix 2 herein.

In addition to his 1950 collection, John Gasparetti made two further collections during the spring and autumn of 1961 in areas north of Kandahar and south of Kabul; both are mentioned by Leviton and Anderson (1961, 1963). In the years that followed, several important expeditions, namely the Richard and Erica Clark Expeditions and the Street Expedition, collected a large number of amphibian and reptile specimens in Afghanistan. The first of these, the Clark Expedition in July and August 1964, obtained 236 specimens representing 26 species, which included two new species, *Eremias aria* Anderson and Leviton, 1967 and *Phrynocephalus clarkorum* Anderson and Leviton, 1967, and four new country records (Clark et al. 1969). The second was the Street Expedition of 1965 with a focus on mammals, but which also collected 247 amphibians and reptiles. This collection comprised 43 species and included seven new country records and two new taxa, *Agama badakhshana* Anderson and Leviton, 1969 and *Agama nuristanica* Anderson and Leviton, 1969. In 1968, Richard and Erica Clark made a second collection in Afghanistan but only published the report 22 years later (Clark 1990). The materials of these expeditions are mainly housed at the California Academy of Sciences and the Field Museum of Natural History (see Material and Methods for details).

Others also made contributions to the Afghan herpetofauna but based on smaller field excursions (see, for example, reports by Wettstein 1960, Mertens 1966, Brück 1968). At about the same time as the second Clark Expedition, Bohumil Král also collected in Afghanistan and published three new country records (Král 1969).

As an outgrowth of these collecting efforts, somewhat over 100 species of amphibians and reptiles were documented in the first herpetofaunal checklist of Afghanistan (Leviton and Anderson 1970). Additionally, Clas Naumann, former director of the Zoologisches Forschungsmuseum Koenig in Bonn, was professor in the Faculty of Science at the University of Kabul from 1970 to 1972, during which time he conducted several field surveys and established a university-based zoological museum. The herpetological specimens collected by him were identified by herpetologists at the Museum Koenig and subsequently shared equally between the museums in Bonn and Kabul. The Kabul Museum was destroyed during the Taliban regime but some remaining lists still document the material accessioned there, here published for the first time.

Since 1970 only a few publications referring to the Afghan herpetofauna have been published. These include solitary published first records, e.g., *Bungarus sindanus* Boulenger, 1897 (Kuch 2004), as well as publications based on expeditions before 1970 (e.g., Clark 1990) and summariz-

ing works like the checklist published by Sayer and van der Zon (1981). But additional new taxa have been described from Afghanistan since 1970 (e.g., Böhme and Szczerbak 1991, Nilson 1983). More recently, Theodore Papenfuss from the University of California at Berkeley (USA) and Research Associate at the California Academy of Sciences, and, independently, the first author of this publication (PW) were able to obtain material from western (Herat), northeastern (Kunduz, Faizabad), and southern Afghanistan. Most recently, Sindaco and Jeremčenko (2008) and Sindaco et al. (2013) provided distribution maps of western Palearctic reptile species that summarize records from Afghanistan, whereas Das (2014) presented a checklist of the amphibians of the country.

Despite the efforts recorded above, it must be noted that for Afghanistan most of the species are still known from very few specimens and localities and, moreover, large parts of the country, e.g., the central mountain massif stretching from Herat to Kabul, are virtually unexplored.

MATERIAL AND METHODS

Material from the following museum or private collections (sorted by their underlined acronyms) was used in assembling this checklist: AFG: Bohumil Král, private collection [based on publications, the current whereabouts of this collection are unknown]. AMNH: American Museum of Natural History, New York, NY, USA. BMNH: The Natural History Museum [formerly British Museum (Natural History)], London, United Kingdom. CAS: California Academy of Sciences, San Francisco, CA, USA. CM: Carnegie Museum of Natural History, Pittsburgh, PA, USA. CUMV: Cornell University Museum of Vertebrates, Ithaca, NY, USA. FLMNH: Florida Museum of Natural History, Gainesville, FL, USA. FMNH: Field Museum of Natural History, Chicago, IL, USA. J: O. Jakeš, private collection [based on publications, the the current whereabouts of this collection is unknown]. LC: Lindberg Collection [material mentioned in literature and only partly inventoried at the MZLU]. MCZ: Museum of Comparative Zoology, Harvard University, Cambridge, MA, USA. MHNG: Muséum d'Histoire naturelle, Genève, Switzerland. MMB: Department of Zoology, Moravske Muzeum, Brno, Czech Republic. MNHN: Muséum national d'Histoire naturelle, Paris, France. MNKNU: Museum of Nature of the Kharkiv National University, Kharkiv, Ukraine. MSNG: Museo Civico di Storia Naturale 'Giacomo Doria', Genoa, Italy. MSNM: Museo Civico di Storia Naturale, Milano, Italy. MTKD: Senckenberg Naturhistorische Sammlungen (formerly Museum für Tierkunde), Dresden, Germany. MVZ: Museum of Vertebrate Zoology, University of California, Berkeley, CA, USA. MZLU: Zoologiska Museet, Lunds Universitet, Lund, Sweden. MZUF: Museo di Storia Naturale (former Museu de Zoologico "La Specola"), Università di Firenze, Florence, Italy. NHMB: Naturhistorisches Museum Basel, Switzerland; NMW: Naturhistorisches Museum Wien, Austria. PWC: Philipp Wagner private collection, Germany (later deposited in Munich [ZSM] or Bonn [ZFMK]). RMNH: Naturalis Biodiversity Center [formerly Rijksmuseum van Natuurlijke Historie], Leiden, Netherlands. SMF: Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt am Main, Germany. SNM: Department of Zoology, Slovakian National Museum, Bratislava, Slovakia. USNM: United States National Museum of Natural History, Washington, DC, USA. ZFMK: Zoologisches Forschungsmuseum Alexander Koenig, Bonn, Germany. ZIK: Zoological Museum, National Museum of Natural History, National Academy of Sciences of Ukraine, Kiev, Ukraine. ZISP: Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia. ZMB: Museum für Naturkunde [formerly Zoologisches Museum], Berlin, Germany. ZMK: Zoological Museum of Kabul, Kabul, Afghanistan [entire collection destroyed as a result of war or Taliban activity]. ZMUC: Københavns Universitet, Zoologisk Museum, Copenhagen, Denmark. ZSI: Zoological Survey of India, Kolkata [Calcutta], India [incorporating collections of the Indian

Museum, and former Museum of the Asiatic Society of Bengal]. ZSM: Zoologische Staatssammlung München, Munich, Germany.

In the checklist that follows, species accounts herein include (a) the citation of the first description, (b) details on primary type material if available and secondary type material if relevant, (c) synonyms, if important for a possible reconsideration of Afghan specimens, (d) Afghan localities (including the province name if necessary) referring to a specific specimen, a photograph or a traceable citation, and (e) remarks, if required, including vague Afghan localities, those with imprecise identification or those referring to topics other than those noted above. The orthography of Afghan locality names is variable and such names are, if used without quotes, herein provided in English translation.

References to places that are in international dispute are placed in the jurisdictions in effect as of the time of the publication. Province names are given if more than one town with the same name can be found within Afghanistan. Specimens from the BMNH collection often cannot be linked to a literature citation as Boulenger and other authors most often did not provide collection numbers.

CHECKLIST OF THE AMPHIBIANS AND REPTILES OF AFGHANISTAN

Amphibia: Anura

Family Bufonidae

Following their phylogenetic results within the genus *Bufo*, Frost et al. (2006) included the complex of the green toads in their new genus *Pseudepidalea*, which is the sister genus to *Epidalea*. Later, Dubois and Bour (2010) regarded *Bufotes* Rafinesque, 1815, as the oldest available name for this group, but placed it as a subgenus of *Bufo*, which is inconsistent with our current understanding of the Bufonidae. However, *Bufotes* is often used at the generic level, although its status is still under discussion. We here retain a more inclusive genus *Bufo*, incorporating several genetic lineages recognized by Frost et al. (2006) within a larger monophyletic genus.

***Bufo viridis* Laurenti, 1768:27, 111, pl. I, fig. 1 - complex**

1768 *Bufo viridis* Laurenti, Specimen Medicum, Exhibens Synopsin Reptilium Emendatum cum Experimentis Circa Venena et Antidota Reptilium Austriacorum. Joan. Thomae. nob. de Trattnern, Vienna, Austria. (8) + 214 + (3) pp., 5 pls. [thesis version]; (2) + 214 + (1) pp., 5 pls. [published version].

TYPE(S).— Including a specimen illustrated on pl. 1, fig. 1 of Laurenti's original publication from "inter fissuras, seu cavernas murorum obscuras Vienna," Austria.

LOCALITIES.— "Bamian" (BMNH 1938.2.4.3; Smith 1940:383); "Doab" (BMNH 1938.2.4.2; Smith 1940: 383); "Pagham" (BMNH 1940.3.1.10–13; Smith 1940: 383); "Tirphul, Afghanistan" (ZSI 13114–13122; Sclater 1892:26 as "*Bufo viridis*").

REMARKS.— Four species of the green toad complex are known to occur in Afghanistan (see below and Das [2014]). However, some historical records cannot be assigned with surety to those species and are here treated as *incertae sedis* within the *Bufo viridis* complex. Boulenger (1889: 105) mentioned two specimens as "*Bufo viridis*" from "Bala-morghab" [= Balal Murghab, Badghis], several specimens of the same taxon from "Tirphul", "Karez-badak", "Kishmaru", "Puza-gish [NW Kilki]" and several tadpoles "from streams of Mt. Do-Shakh [North of Kilki]", which should be, at least partly, present in the BMNH collection. Uéno and Nakamura (1966) also noted a specimen of "*Bufo viridis*" from "Ishkashim, Wakhan, N. Afghanistan" and seven specimens of the same taxon from "Kabul". Specimens of the complex from Afghanistan are shown in Fig. 2.



FIGURE 2: Specimens of the *Bufo viridis* complex from Faizabad, Afghanistan. Photos by F. Joisten.

***Bufo oblongus oblongus* Nikolskii, 1896:372**

1896 *Bufo oblongus* Nikolskii, Diagnoses Reptilium et Amphibiorum novorum in Persia orientali a N. Zarudny collectorum. Annuaire du Musée Zoologique de l'Académie Impériale des Sciences de St.-Pétersbourg 1(4):369–372.

LECTOTYPE.— ZISP 1952.1 (designated by Stöck et al. 2001), from “Persia orientali” according to the original description, but subsequently given more precisely as Ssaman-Shahi mountains in eastern Iran (Nikolskii 1897). Later restricted by reference to the collection itinerary to the city of Birjand (about 32°55'N, 59°10'E) by Stöck et al. (2001).

LOCALITIES.— 40 km S of Herat (CAS 120517–26, CAS 120656–75, CAS 120963–72); Juwain (CAS 120529–31, CAS 120680); Kara Bagh (CAS 90795); SE of Zehak (along the Iran-Afghanistan border, Agricultural College) (1450 ft.) (MVZ 243504–05) [see pl. 1, fig. 1 for distribution].

REMARKS.— Stöck et al. (2001) recorded the species only for Iran, but mentioned that an occurrence in western Afghanistan is possible.

***Bufo pseudoraddei baturae* Stöck, Schmid, Steinlein, and Grosse, 1999:221**

1999 *Bufo pseudoraddei baturae* Stöck, Schmid, Steinlein and Grosse, Mosaicism in somatic triploid specimens of the *Bufo viridis* complex in the Karakoram with examination of calls, morphology and taxonomic conclusions. Italian Journal of Zoology 66:215–232.

HOLOTYPE.— ZSM 103/1998, from “a plain above the right bank of the Hunza River near the mouth of the Shimsal River, north of the village of Pasu, 2700 m a.s.l., Karakoram, Pakistan.”

LOCALITIES.— Baraki Barak [Logar Prov.] (USNM 194958–62); Culangor [Logar Prov.] (USNM 194595–97); Feyzabad (ZFMK 95001–02); 20 mi. from Jalalabad [towards Kabul] (CAS 147443); Kabul (CAS 92325–28, CAS 120705, CAS 151241, ZFMK 14458–59, ZFMK 15695); Kabul Seh Carte (CAS 151214–15); 10 mi E Kabul (CM 49535–44); 70 km S Kabul (CAS

120534, CAS 120681); Marshy area along Logar River, 7–8 mi from Kabul (CAS 92337); Mukur (halfway btwn Kabul and Kandabar) (CAS 90779–93); Paghman [34°36'N, 68°56'E] (CAS 115911–12, CAS 151235–39); ca. 4 km above Paghman (7950 ft.) (MVZ 237418–237420) [see pl. 1, fig. 2 for distribution].

REMARKS.— Stöck et al. (2001) recognized this subspecies only for Pakistan, but mentioned that an occurrence in Afghanistan is possible. Hemmer et al. (1978) mentioned three specimens as “*Bufo viridis*” from Kabul collected by Seuffer. However, one of the specimens (ZFMK 14457) is actually a snake (*Spalerosophis diadema*).

***Bufo turanensis* Hemmer, Schmidtler and Böhme, 1978:378**

1978 *Bufo viridis turanensis* Hemmer, Schmidtler, and Böhme, Zur Systematik zentralasiatischer Grünkröten (*Bufo viridis*-Komplex) (Amphibia, Salientia, Bufonidae). Zoologische Abhandlungen. Staatliches Museum für Tierkunde in Dresden 34(24):349–384.

HOLOTYPE.— MTKD D 11195, from “Duschanbe (Stadttrand), Tadshikische SSR/UdSSR” [Duschanbe (outskirts), Tajikistan, about 38°38'N, 68°51'E].

LOCALITIES.— 12 mi E Eshksham Wakhan (Ishkamish [36 43 N, 71 34 E]) (CAS 115909); 19 km E Ishkamish (FMNH 161091); Kunduz (ZFMK 8541–43, ZFMK 95003); Maimana [35°54'N, 64°43'E] (CAS 115910, FMNH 161065–68, FMNH 161071, FMNH 161171); Mazar-i-Sharif (FMNH 161110); 12 km NW Samangan (CAS 120704); 24 km E Taliqan (CAS 120973) [see pl. 1, fig. 3 for distribution].

REMARKS.— None.

***Bufo zugmayeri* Eiselt and Schmidtler, 1973:206**

1973 *Bufo viridis zugmayeri* Eiselt and Schmidtler, Froschlurche aus dem Iran unter Berücksichtigung ausseriranischer Populationsgruppen. Annalen des Naturhistorischen Museums in Wien 77:181–243.

HOLOTYPE.— ZSM 211/11–2, from “Pishin (P), Pakistan” [about 30°35'N, 67°00'E, Balochistan, Pakistan].

LOCALITIES.— Ghazni (CAS 91603–09); 15 km N Ghazni (CAS 120532–33, CAS 120678–79, CAS 120702–03); Kandahar [31°36'N, 65°47'E] (CAS 115913–14); 35 km NW Lashkargah (CAS 120527–528, CAS 120676–77); Sharisafa, 60 km NE of Kandahar (CAS 90761); Foot of hills 10 km NW of Sharisafa (CAS 90778) [see pl. 1, fig. 4 for distribution].

REMARKS.— Although details of the distribution of this species are as yet unknown, Stöck et al. (2001) suggested that the northern limit of its distribution reaches the *B. pseudoraddei* populations in eastern Afghanistan and western Pakistan. This species is not mentioned in the checklist by Das (2014).

***Duttaphrynus stomaticus* (Lütken, 1864:305)**

1864 “1863” *Bufo stomaticus* Lütken, Nogle ny krybyr og padder. Videnskabelige Meddelelser fra Dansk Naturhistorisk Forening i Kjøbenhavn, ser. 2, 4:292–311.

SYNTYPES.— ZMUC R 131136–37, from “ostindiske” [= East Indies], incorrectly restricted to “Assam”, India, by Boulenger (1891).

SYNONYMS.— *Bufo andersonii* Boulenger, 1883 from “Ajmere [Ajmer, Rajasthan, India]” by lectotype (BMNH 83.11.26.105) designation (Balletto et al. 1985). *Bufo andersonii* Murray, 1884 from “Sind (Tatta [= ponds] and Joongshai)”, Pakistan (types in the Karachi Museum, but presumed lost).

LOCALITIES.— Jalalabad (Spinlar Hotel) (1950 ft.) (MVZ 236862, 237421–29); 30 km W Jalalabad (CAS 120535–37); 20 km SW Jalalabad (CAS 120535); Jalalabad [34°26'N, 70°25'E] (CAS 115908, FMNH 161040); Kandahar (FMNH 161266); Khost [Paktia Prov.] (CAS 96172, ZFMK 8668); Paghman [34°36'N, 68°56'E] (CAS 115904–07, FMNH 161038–42, FMNH 161044–46, FMNH 161048–50); 16 km S Qala-i-Kang [30°58'N, 61°54'E] (CAS 115902–03, FMNH 161037) [see pl. 1, fig. 5 for distribution].

REMARKS.— For comments about the Karachi Museum see next species account.

Family Dicroglossidae

Chrysopaa sternosignata (Murray, 1885:120)

1885 *Rana sternosignata* Murray, A new frog (*Rana sternosignata*) from Sind. *Annals and Magazine of Natural History*, ser. 5, 16:120–121.

SYNTYPES.— Unknown number in the “Kurrachee Municipal Museum” (presumably the Karachi Museum), most likely now lost. BMNH 1947.2.1.21–22 from “Mulleer [= Malir] near Kurrachee [= Karachi (Sind)]; Zandra and Quetta [Baluchistan], in South Afghanistan”; all localities actually in Pakistan.

LOCALITIES.— Arbarp [10 mi. W Kabul, 7000 ft.] (according to Smith [1940:383], probably BMNH 1940.3.1.6–9); Baraki Barak [Logar Prov.] (USNM 194964–65, USNM 194967–70); Culangor [Logar Prov.] (USNM 194591–94); vicinities of Kabul (ZFMK 18981); Kabul Seh Carte (CAS 151216–19); Kandahar (FMNH 161279); Kargha stream, nr Kabul (CAS 133828); Marshy area along Logar River, 7–8 mi from Kabul (CAS 92330–36); Khost (CAS 96171); Kurdkabul Dam (CAS 151223–26); Paghman [34°36'N, 68°56'E] (CAS 115917–18, FMNH 161221, FMNH 161224); ca. 4 km above Paghman (7950 ft.) (MVZ 237438); Sinjui (MNHN 1985.3000) [Fig. 3; see pl. 1, fig. 6 for distribution].

REMARKS.— At the time of the description, Murray was librarian and curator of the Kurrachee Municipal Library and Museum (Adler 2012). Therefore, he most probably deposited type specimens in this collection. However, he was also in good contact with Albert Günther and donated specimens, including the syntypes, to the British Museum. Moreover, material collected by Murray as well as material from the “Karachi Museum”



FIGURE 3: *Chrysopaa sternosignata* from Logar River, Afghanistan. Photo by R. Maroor.

were sent to the Indian Museum in Calcutta (Sclater 1891, 1892).

***Euphlyctis cyanophlyctis* (Schneider, 1799:137)**

1799 *Rana cyanophlyctis* Schneider, *Historiae Amphibiorum naturalis et literariae*. Fasciculus Primus continens Ranas, Calamitas, Bufones, Salamandras et Hydros in genera et species descriptos notisque suis distinctos. Vol 1. Friederici Frommanni, Jena. xiii + (1) + 264 + (2) pp., pls. 1–2.

SYNTYPES.— ZMB 3197–98 (*vide* Peters [1863]), from “India orientali” (probably from Tranquebar [Tharangambadi, Nagapattinam District, Tamil Nadu, India] *vide* Bauer 1998).

SYNONYMS.— *Rana cyanophlyctis* var. *seistanica* Nikolskii, 1899 from “Neizar in Seistano” [Neizar, Kerman, Iran] (Holotype: ZISP 2503). *Euphlyctis cyanophlyctis microspinulata* Khan, 1997 from “side pool of a stream on the southwest of Khuzdar (southeast Kalat Division, Balochistan, Pakistan; lat. 27°53'N, long. 66°36'E),” (Holotype: BMNH 1990.8; see remarks).

LOCALITIES.— 48 km W Dilaram (FMNH 161982); Geresk Basic Health Center (CAS 147433); Helmand River, Chah-i-Angir (CAS 133827); Jalalabad (CAS 103776–77, ZFMK 7937–40); 10 mi W of Jalalabad [34°30'N, 70°22'E] (CAS 96179–88); 20 km SW Jalalabad (CAS 120515); 20 mi from Jalalabad [towards Kabul] (CAS 147438–42); ca. 25 km SE (by air) Jalalabad (2020 ft.) (MVZ 236870–75, MVZ 237434–35); 45–15 km W of Jalalabad (CAS 120505–14); Khost (CAS 96168–70); Lashkargah (CAS 120682, CAS 147434–36); Oarya-e-Matun, vic. of Khost [Paktia Prov., 1160 m] (ZMK 2731) [see pl. 1, fig. 7 for distribution].

REMARKS.— Clark (1990) mentioned specimens from Lashkargah that were collected from irrigation channels and in steep-sided pools. A specimen with the number “1990.8” does not now and never existed at the BMNH (pers. comm. F. Tillak). Therefore, the type specimen was never inventoried in the BMNH and is probably still in a private collection or lost.

***Hoplobatrachus tigerinus* (Daudin, 1803:64)**

An XI (1803) *Rana tigerina* Daudin, *Histoire Naturelle des Rainettes, des Grenouilles et des Crapauds*. Quarto version, Levrault, Paris. 108 pp., col. pls. 1–38 [see pl. 20].

HOLOTYPE.— Animal figured on pl. 20 of the description (now presumably lost), from “Bengale” [India].

LOCALITIES.— Khost, close to Khyber Pass [Paktia Prov., 1200 m] (ZFMK 15984) [see pl. 1, fig. 8 for distribution].



FIGURE 4: *Hoplobatrachus tigerinus* from Afghanistan. Photo by W. Böhme.

REMARKS.— In Afghanistan, this species is known from a single record (Fig. 4) (Kullmann 1970) and has so far not been found again.

Family Ranidae

Pelophylax terentievi (Mezhzherin, 1992:150)

1992 *Rana terentievi* Mezhzherin, Novij vid zelenikh zhab *Rana terentievi* sp. nova (Amphibia, Ranidae) z pivdnennogo Tadjhikistanu [A new species of green frog *Rana terentievi* sp. nova (Amphibia, Ranidae) from South Tajikistan]. Dopovidi Akademii nauk Ukraïni. Matematika, Prirodnavstvo, Tekhnichni Nauki. Zoologiya 5:150–153.

HOLOTYPE.— ZIK 25441, from “Tadjhikistan, Komsomolabadskij r-n, smt Obi-Garm” [Obigarm, Roghun District, Tajikistan]. In the original description (Mezhzherin 1992) ZIK 25441 is given as holotype, but according to Pisanets (2001) this specimen is now “Amph A3” of the NNHM NASU.

LOCALITIES.— Baghlan (USNM 194986); Bokan (MZLU L957/3078); Doshi, 2700ft (Smith 1940, probably BMNH 1938.2.4.1); Hari Rud, under Malan Bridge, nr Herat (CAS 133829–30); Herat area [34°20'N, 62°10'E] (CAS 115915, FMNH 161114–15); ca. 25 km SE (by air) Jalalabad (2020 ft.) (MVZ 236876); 24 km E Khanabad (CAS 120699); Khenjan (CAS 120516, CAS 120683–98, CAS 120979–81); Kunduz, 400 m. (ZFMK 8535–40); Paghman (FMNH 161055); 24 km E Taliqan (CAS 120982–86); 65 km NE Taliqan (CAS 120700–01); Zebak, 64 mi by rd E Faizabad (CAS 115916, FMNH 161124–25) [see pl. 2, fig. 1 for distribution].

REMARKS.— Although Afghan specimens (Fig. 5) were previously recognized as *Rana ridibunda* and more recently as *Pelophylax ridibundus*, we believe that they should be referred to the species above. Previously, *Pelophylax terentievi* was recognized only from southern Tajikistan and northwestern Xinjian in China, thus this is the first mention of this taxon for Afghanistan. Uéno and Nakamura (1966) mentioned one additional specimen from Khanabad, N. Afghanistan, but without providing a reference or voucher specimen. Clark (1990) mentioned this species (as *R. ridibunda*) as very abundant at Khenjan where specimens occurred in streams, ponds and irrigation ditches.



FIGURE 5 *Pelophylax terentievi* from Feyzabad (Badakshan Province), Afghanistan. Photo by Frank Joisten.

Amphibia: Caudata
Family Hynobiidae

***Afghanodon mustersi* (Smith, 1940:382)**

1940 *Batrachyperus mustersi* Smith, Contributions to the herpetology of Afghanistan. Annals and Magazine of Natural History, ser. 11, 5:382–384.

HOLOTYPE.— BMNH 1946.9.6.59 (formerly BMNH 1940.3.1.1), from “mountain streams of the Paghman Range, above Paghman [= 17 mi. W Kabul], at between 9000 and 10,000 feet altitude,” Afghanistan. *Paratypes.*— BMNH 1946.9.6.60–63 (formerly 1940.3.1.2–5), same locality as the holotype.

LOCALITIES.— Darrahe Pain Stream, 3 mi N Paghman (9000 ft.) (MVZ 232869); 20 km NW of Kabul, Paghman, Pain tributary of Paghman stream (USNM 216262–63); 20 km NW of Kabul, “dans cuvette d’un torrent à Paghman” (MNHN 1981.2081); Paghman (ZFMK 8515–34, 7933–34); Paghman, 1800 m. (ZFMK 5375); Paghman Mts. (KU 194380–83, MCZ A–99124–26, MNHN 1988.7183–85); Paghman, Paghman stream (CAS 151240); 3 mi N Paghman in Darrahe Pain Stream (CAS 149128–9); Paghman, Paghman Stream, Darrehe Cape tributary (CAS 146996–031); Paghman, Paghman Stream, Darrehe Pain tributary (CAS 146985–95, CAS 147044–67, CAS 147084–108, CAS 152088); Paghman, Paghman Stream, Darrehe Raste tributary (CAS 147032–43, CAS 147068–83); ca. 4 km above Paghman (7950 ft.) (MVZ 236802–25); 4 km from Paghman (ZISP 6838.1–3); Pengachon, ca Kabul (KU 194385, KU 194387); Salang pass, 2700 m. (KU 194384, ZFMK 13343); Sanglakh, 60–80 km W of Kabul (MNHN 1987.478, MNHN 1987.652, MNHN 1993.827) [see pl. 2, fig. 2 for distribution].

REMARKS.— This species (Fig. 6) is endemic to Afghanistan where it is known from three tributaries of the Paghman Stream drainage (appr. 4 km above the town of Paghman) 2,440–3,750 m elevation. The stream, which is fed by melting glaciers and is about 4 km long, provides the sole known habitat for this species.

CONSERVATION.— *Afghanodon mustersi* is impacted by irrigated cultivation, overgrazing and physical disturbance by livestock and pedestrians (Stuart et al. 2008). Moreover, there is a potential for damming the stream as a water source for Kabul, that would likely have a strong negative impact on this salamander. As it is endemic to Afghanistan and does not occur within protected areas, it should be considered a high priority in conservation management of Afghanistan.



FIGURE 6: *Afghanodon mustersi* from the Paghman Range. Photo by W. Böhme.

Reptilia: Squamata

Family Agamidae

Calotes versicolor farooqi Auffenberg and Rehmann, 1995:27

1995 *Calotes versicolor farooqi* Auffenberg and Rehman, *Calotes versicolor nigrigularis* Auffenberg and Rehman 1993 a junior primary homonym. Asiatic Herpetological Research 6:27.

HOLOTYPE.— FMNH 79470, adult male from “rocky hillside Shargal, 20 km S of Balakot Manshera Dist., Northwest Frontier Province (lat. 34.3°N, long. 73.4°E), Pakistan.”

LOCALITIES.— Alikhel [2200 m, Prov. Paktia] (ZFMK 8631); Jalalabad (MMB 28465–66); 30 km SW Jalalabad (CAS 120557, CAS 120720); 40 km SW Jalalabad (CAS 120721–22); 45 km W Jalalabad (CAS 120558); Btwn Kabul and Sarobi, nr rd, 30 mi E of Kabul [34°33'N, 69°35'E, Prov. Kabul] (CAS 96257); Nimla [1000 m, Prov. Nangerhar] (ZFMK 8630) [see pl. 2, fig. 3 for distribution].

REMARKS.— This taxon was described by Auffenberg and Rehmann (1993) as *Calotes versicolor nigrigularis* but the authors overlooked *Calotes nigrigularis* Ota and Hikida, 1991 and, therefore, their name is a junior primary homonym. Somewhat later, the same authors introduced *Calotes versicolor farooqi* as a new name for the previous taxon (Auffenberg and Rehmann 1995). Clark et al. (1969) and Clark (1990) collected several individuals on stone walls near streams, on earth banks, bamboo thickets and amongst vegetation. The BMNH collection holds a number of specimens labeled as “*Calotes emma*, BMNH 1946.8.11.26 [type]”, “*Calotes jerdoni*, BMNH 1860.3.19.1021”, “*Calotes maria*, BMNH 1860.3.19.1020, BMNH 1946.8.11.24 [type]” and “*Calotes versicolor*, BMNH XXIV.29.k, BMNH XXIV.29.t, BMNH 1860.3.19.1022” from “Afghanistan” most of which have not been examined but likely could represent this taxon.

Laudakia Gray, 1845 — *sensu lato*

The genus *Laudakia* was recently subdivided into three genera (*Stellagama*, *Paralaudakia*, and *Laudakia*) by Baig et al. (2012). Although Pyron et al. (2013) used *Laudakia* in the more inclusive sense, we here follow the more integrative concept by Baig et al. (2012) because of the strong differences in morphology, anatomy, dentition, and cranial anatomy among the three monophyletic lineages within the laudakian agamas.

Laudakia agrorensis (Stoliczka, 1872:128)

1872 *Stellio agrorensis* Stoliczka, Notes on some new species of Reptilia and Amphibia collected by Dr. W. Waagen in north-Western Punjab. Proceedings of the Asiatic Society of Bengal 1872:124–131.

SYNTYPES.— ZISP 4206, from “Sussel Pass, at the entrance into the Agror Valley, 6000 feet, Hazara district, N.W. Punjab”; NMW 16754 and BMNH [not located, probably BMNH 1880.11.10.9], from the same locality.

LOCALITIES.— Jalalabad (FMNH 161161); Lindai-Sin Valley [1700 m, Prov. Nuristan] (ZFMK 8637); Nuristan (ZFMK 8633–35); Petsch-Tal [1600 m, Prov. Nuristan] (ZFMK 8638); Petsch-Valley, Zunsail [1400 m, Prov. Nuristan] (ZFMK 8636) [see pl. 2, fig. 4 for distribution].

Laudakia melanura melanura Blyth, 1854:738

1854 *Laudakia (Placoderma) melanura* Blyth, Proceedings of the Society. Report of the Curator, Zoological Department. Journal of the Asiatic Society of Bengal 23 [1854]:737–740.

TYPE(S).— Not located (see remarks), from “Kashmir”.

SYNONYMS.— *Stellio liratus* Blanford, 1874 from “Gedrosia, Baluchistan” interpreted as “Saman, Dasht Province, Baluchistan” by Smith (1935).

LOCALITIES.— Ali Khel, southern side of Safed-Koh [Paktia Prov., 2200 m] (ZFMK 8627); Darunta near Jalalabad [Nangahar Prov., 650 m] (ZFMK 8544) [see pl. 2, fig. 5 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) recognized this taxon only from the border area between Pakistan and Afghanistan; ZFMK specimens provide the first record of *L. melanura* from Afghanistan. Blyth (1868:32) himself recognized his *L. melanura* as synonym of *L. tuberculata* and mentioned a juvenile female from “Simla” from the collection of the Asiatic Society of Bengal that had been donated by W. Theobald. Even though Simla is quite distant from Kashmir, this specimen could be a type specimen, as we now know that the species has a relatively extensive distribution.

***Laudakia nupta nupta* (De Filippi, 1843:407)**

1843 *Agama nupta* De Filippi, Intorno ad alcune specie di rettili. Giornale del VI. R Istituto Lombardo e Bibliotera Italiana 6:407–415.

HOLOTYPE.— Not located [Milan], from “Persepolis,” Iran.

SYNONYMS.— *Stellio carinatus* Duméril, 1851 from “Aucher-Eloy, Perse.”

LOCALITIES.— Bamian (on rd to Saigon), along Kunduz River (CAS 147444–52); 40 km NW Delaram (CAS 120736); 65 km NW Delaram (CAS 120734–35); 48 km W Dilaram (FMNH 161077); 20 km E Farah (CAS 120732–33); 55 km W Girishk (CAS 120556, CAS 120731); Jalalabad area (Brück 1968); 30 km SW Jalalabad (CAS 120730); Nimla [Nangarhar Prov., 1000 m] (ZFMK 8628); 2 km SE Jalalabad (MMB 28467); 8 km ESE Jalalabad (MMB 28470); 45 km W Jalalabad (CAS 120554–55); Kabul (ZMUC R-36210); 67 km E (by Jalalabad Rd.) of Kabul at Puli Churkhi suburb (MVZ R-236883); Kaikay (ZMUC R-36189); Kandahar (CAS 115936–38, FMNH 161257–58, FMNH 161260, FMNH 161262–63, ZFMK 2682, ZFMK 7924); ca. 15 km SSW Kandahar (by Panjuai Rd.) (MVZ 237456); 107 km ENE (by Kabul Rd.) of Kandahar at junction of Quetta Rd. and Kabul Rd. (MVZ 237457); Kouh-Bachio [= Kouh-Bachtou near Farah] (MZLU L958/3240); 5–10 mi ENE of Nimla, on old Kabul-Jalalabad rd, and about 10 mi SW of Balabagh [34°19–21'N, 70°10–15'E] (CAS 96196–97, CAS 96210); 4 km S [by air] Paghani (MVZ 236884–85); Pirezada (ZMUC R-36190); Somarkhel [banks of Kabul River], about 15 km E Jalalabad (MMB 28478–69) [see pl. 2, fig. 6 for distribution].

REMARKS.— The holotype was present in the Milan collection at the time of Jan’s catalogue (Jan 1857) but it now seems to be lost and was not mentioned by Scali (2010).

***Laudakia nuristanica* (Anderson and Leviton, 1969:39)**

1969 *Agama nuristanica* Anderson and Leviton, Amphibians and reptiles collected by the Street expedition to Afghanistan, 1965. Proceedings of the California Academy of Sciences, ser. 4, 37:25–56.

HOLOTYPE.— FMNH 161136, adult male from “Kamdesh, eastern Afghanistan [1342 meters elevation]”.

LOCALITIES.— Kamdesh [35°25'N, 71°26'E] (FMNH 161136, CAS 115939); Lindai-Sin Valley [Nuristan Prov., 2200 m] (ZFMK 8624–25); Nuristan (ZFMK 8618–23) [see pl. 2, fig. 7 for distribution].

***Laudakia tuberculata* (Gray, 1827:218)**

1827 *Agama tuberculata* Gray In Hardwicke and Gray, A synopsis of the species of saurian reptiles, collected in India by Major-General Hardwicke. Zoological Journal, London 3:213–229.

HOLOTYPE.— BMNH 1946.8.28.17 (formerly BMNH 60.3.19.1377) from “India,” probably incorrectly restricted to “Bengal” by Smith (1935). Although not explicitly stated, the description appears to be based on a single specimen and Gray (1845) noted only a single specimen from Hardwicke in the BMNH collection.

SYNONYMS.— *Stellio indicus* Blyth, 1853 from “Mirzapore [= Uttar Pradesh, northern India] and Wuzeerabad [= in North-West Frontier Province, northern Pakistan]”; *Barycephalus sykesii* Günther, 1860 from “Simla, Himalaya”.

LOCALITIES.— Afghanistan [without detailed locality] (ZFMK 8615, ZMB 12477) [see pl. 2, fig. 8 for distribution].

REMARKS.— Brück (1968) provided a record of *L. tuberculata* (referenced in Sindaco and Jeremčenko [2008]) from “dem Gebiete um Djelalabad” [= vicinity of Jalalabad], so maybe the specimens mentioned herein also originate from this area. However, as this is not a precise locality it is not mapped here.

***Paralaudakia badakhshana* (Anderson and Leviton, 1969:33)**

1969 *Agama badakhshana* Anderson and Leviton, Amphibians and reptiles collected by the Street expedition to Afghanistan, 1965. Proceedings of the California Academy of Sciences, ser. 4, 37:25–56.

HOLOTYPE.— FMNH 161108, from “Mazar-i-Sharif, northern Afghanistan, 36°34'N, 67°05'E, 457 m elevation.”

LOCALITIES.— Dashit-e-Nawar (ZFMK 13315–16); Pass to Dashit-e-Nawar [Ghazui Prov., 3000 m] (ZFMK 8608–12); 64 mi by rd E Faizabad (CAS 115924); Farakhlum near Garandewal [Prov. Wardak, 2500 m] (ZFMK 54796); southern side of Kotal-e-Sha-tu, vic. Pandjao [Bamian Prov., 2500 m] (ZMK 2828); Kotal-e-Unai: [Prov. Wardak, 2800 m] (ZFMK 54795); Mazar-i-Sharif (FMNH 161108); Paghman [34°36'N, 68°56'E] (CAS 115925, FMNH 161175); Paghman stream (CAS 147423); 4 km S [by air] Paghman (MVZ 237442–48); Pari Kham near Darwāz [Prov. Badaksha, 2700 m] (ZFMK 8552); Salang Pass [Kabul Prov., 3000 m] (ZFMK 5377–81); Salang Pass, N of, road to Pulikumri [= Pol-e Khomri, Prov. Baghlan] (USNM 194973–76); Wakhan near Sarhad [Prov. Badakshan, 2900–3100 m] (ZFMK 52029–51, ZFMK 52056); Shipun (ZFMK 8550–51); Wakhan, Zemestani Baharak [Prov. Badakshan, 3300 m] (ZFMK 52052–55) [see pl. 3, fig. 1 for distribution].

REMARKS.— There is an additional series of specimens from unknown localities in Afghanistan in the FMNH (161132, 161172). Baig (1992), Sindaco and Jeremčenko (2008), and Baig et al. (2012) only provide two confirmed records and expressed doubt about the type locality of Mazar-i-Sharif.

***Paralaudakia caucasia* (Eichwald, 1831:187)**

1831 *Stellio caucasius* Eichwald, Zoologia Specialis quam Expositis Animalibus tum Vivis tum Fossilibus Potissimum Rossiae in Universum, et Poloniae in Specie, in Usu Lectionum Publicarum in Universitate Caesarea Vileni Habendarum. Pars Posterior; Specialem Expositionem Spondylzoorum Continens, Pars Posterior [= Vol. 3]. Josphehi Zawadski, Vilnae [Vilnius], Russia [now Lithuania]. (3) + 404 pp., 2 folding pls. (Decima Classis. Amphibia [pp. 116–197]. Explicatio Tabularum [pp. 395–396]. Index Generum [pp. 397–404]).

TYPE(S).— Not located, from “Hab. in Caucaso, prope Tiflisium [= Tbilisi, Georgia], Bacuam [= Baku, Azerbaijan].”

SYNONYMS.—*Lacerta muricata* Pallas, 1814 “1827” from “in deserto Magno”; *Stellio persicus* Anderson, 1872 from “Teheran” (holotype ZISP 4830); *Agama reticulata* Nikolskii, 1912 from “Tschubek, Ost-Buchara”.

LOCALITIES.— Ajar Valley (RMNH 25954–58); Bamiyan 8000 ft. (Smith 1940: 384; probably BMNH 1938.2.4.7–9); Bamiyan, NW of Kabul MCZ R-97297–98); 1–8 km East of Bamiyan Hotel, Bamiyan (MVZ R-97302–05); road N of Band-e-Amir [ca 35°05'N, 67°47'E] (CAS 243989); Baraki Barak [Logar Prov.] (USNM 194605); 1/2 hr E (by car) Chacharan on Shina River (CAS 147407); 40 mi S Characharan (CAS 147465); Chinkiloh (Boulenger 1889: 96); Chudjomborak [Maidan Prov., 2500 m] (ZFMK 20983); NE Dashi-Doab (on road to Kundus) n. of Kabul (MCZ R-97300); Doab 5000 ft. (Smith 1940: 384; probably BMNH 1938.2.4.4–6); Kharzar ou Tang-Djangan Baz (MZLU L957/3052); Khwadja Ghar (ZFMK 8546); Pass to Dasht-e-Nawar [Ghazni Prov., 2700–3000 m] (ZFMK 8600, ZFMK 8607); Gardez (ZMUC R-36136); 40 km S of Herat (CAS 120747–49); Kundus R. NE Dashi-Doab N of Kabul (MVZ R-97300); 15 km N Ghazni (CAS 120551–53); 20 mi N of Ghazni [33°40'N, 68°30'E] (CAS 98969); NW of Kabul (MVZ R-97297–98); 80 km S Kabul (CAS 120750); Kharzar (LC, Wetsstein 1960); 1 mi N Kurdkabul Dam (CAS 151227); 4 mi from Kurdkabul Dam towards Buthak (CAS 151229); Masdjed-Tchoubi (MZLU L959/3051); Meiden Khula, about 30 mi ENE Gardez [33°40'N, 69°50'E] (CAS 96246–47); Narai (NW of) [31°31'N, 70°04'E] (CAS 96248–49); Obeh [= Owbi, Herat Prov.] (ZMUC R-36137–44, 36187–88); Paghman (CAS 151231–34, FMNH 161058–62, FMNH 161174, FMNH 161176, FMNH 161209–12, FMNH 161214–15, FMNH 161219, ZFMK 5382–83); Paghman [34°36'N, 68°56'E] (CAS 115926–31); above Paghman (Smith 1940: 384; probably BMNH 1940.3.1.18); nr Paghman River, 10 km SW of Kabul (CAS 92329, CAS 92338); Paghman, 15 mi W of Kabul [34°36'N, 68°56'E] (CAS 96251–52); Paghman, Darrehe Cape (CAS 147424); Paghman, Kohe Katasang (CAS 147421–22); Pari Kham (ZFMK 8547); Pini Share Valley, 150 mi NE of Kabul [Kapisa Prov.] (USNM



FIGURE 7: *Paralaudakia caucasia* from Feyzabad (Badakshan Province), Afghanistan. Photo by Frank Joisten.

194981–85); Pul-e-Khumeri [1300 m] (CAS 120324, 120738–41, ZFMK 8588); Rabatak (ZFMK 8548); Shibar Pass (RMNH 25962); 20 km W. of Shibar Pass, road from Bamiyan to Kabul (MCZ R-97301); Southern side of Safed-Koh [Prov. Paktia, Ali Khel, 2100 m] (ZFMK 8626); Toward Ghazni, a few km from village of Shash Gao (CAS 91590–98); 20 km W. of Shibar Pass, road from Bamiyan to Kabul (MVZ R-97301); 24 km E Taliqan (CAS 120745–46); Tang-e-Tashaurghan, Khuin [Samangan Prov., 700 m] (ZFMK 8601–03); 10 km W of Tashkurgan (CAS 120742–44); Urgun (ZFMK 8549) [see pl. 3, fig. 2 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) recognized *P. caucasia* (Fig. 7) only from north-western and northeastern Afghanistan whereas our records show that this species is widespread at higher elevation across the country. Wagner and Dittmann (2014) mentioned that dried individuals of *Paralaudakia caucasia* were sold in a Chinese market in Kabul as medicine (Fig. 8), and have a use similar to that of *Gekko gekko* in East and Southeast Asia.



FIGURE 8: Dried individuals of *Paralaudakia caucasia* sold as medicine in a Chinese market in Kabul. Photo by A. Dittmann.

***Paralaudakia erythrogaster* (Nikolskii, 1896:370)**

1896 *Stellio erythrogaster* Nikolskii, Diagnoses reptilium et amphibiorum novorum in Persia orientali a N. Zarudny collectorum. *Annuaire Musée Zoologique de l'Académie Impériale des Sciences de St.-Pétersbourg*, 1(4):369–372.

SYNTYPES.— ZISP 8759 and 8760, from “Persia orientali.”

SYNONYMS.— *Stellio erythrogastra* var. *pallida* Nikolskii, 1897 from “prope urbem Mesched”. *Agama caucasia mucronata* Guibe, 1957 from “Langarak, 60 km E of Meched, on road to Sarakhz [Iran]”; *Stellio erythrogaster nurgeldievi* Tuniyev, Atayev, and Shammakov, 1991 from “eastern Kopet-Dagh, Turkmenistan.”

LOCALITIES.— Khost [Paktia Prov., 1200 m] (ZFMK 8632); Maimana [Maimana Prov., 850 m] (CAS 115933, FMNH 161195, ZFMK 8614); Murghat Prov. [without detailed locality] (ZFMK 8613); vic. of Paghman [34°36'N, 68°56'E] (CAS 115932, FMNH 161187, FMNH 161189–90) [see pl. 3, fig. 3 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) also recognized this species from northwestern Afghanistan but without mentioning the source of their data.

***Paralaudakia himalayana* (Steindachner, 1867:22, plate 1, fig.8)**

1867 *Stellio himalayanus* Steindachner *In Reise der Österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. von Willerstorff-Urbair* (Zoologie), Vol. 1, part 3 (Reptilien p.1–98, 3 plates). K. Gerold's Sohn/Kaiserlich-Königl. Hof- und Staatsdruckerei, Wien.

SYNTYPES.— NMW 16752: 1–12, NMW 16753: 1–2, from “Lei [= Leh]” and “Kargil,” Ladakh Prov., Kashmir. According to Grillitsch et al. (1996), a skull (NMW 578) from the same area and collector could also be part of the syntype series.

LOCALITIES.— Ajdaha, vic. of Bamyan (MNHN 1948.330–37); Btw. Bamian and Panjao (CAS 147454–64); 12 mi E Eskhsham Wakhan (Ishkamish, Ishkamish = 36°43'N, 71°34'E] (CAS 115934–35); Khandout, 148 km E of Ichkachin, Vakhan (MZLU L960/3045); 2 km NW Panjoa (CAS 147453); Shipun (ZFMK 8550–51) [see pl. 3, fig. 4 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) only provide records from northern and northeastern Afghanistan.

***Paralaudakia lehmanni* (Nikolskii, 1896:XIV)**

1896 *Stellio lehmanni* Nikolskii, Sur deux nouveaux reptiles du Turkestan. *Annuaire Musée Zoologique de l'Académie Impériale des Sciences de St.-Pétersbourg*, 1:XIII–XV.

SYNTYPES.— ZISP 2367, from “Oalyk-tau” [= Oalyk mountain, Samarqand province, Uzbekistan]; ZISP 8664, from “Nuratau montains, Zerbent” [= Zerbent River, Nuratau mountains, Jizzakh province, Uzbekistan]; ZISP 8665, from “Nuratau mountains, Temur-Kauk well,” Jizzakh province, Uzbekistan; ZISP 8666.1, 8666.2, 8689.1, 8689.2, from “Southern Kyzylkum, Kum-Kuduk well,” southern part of Kyzylkum desert, Uzbekistan; NMW 23485 from “Baba-tau” (donated by the St. Petersburg Museum *vide* Tiedemann and Häupl [1980]).

SYNONYMS.— *Agama borstschewskyi* Elpatjewsky and Sabanejew, 1907 from “area of Buchara [= Buxoro]”, Uzbekistan.

LOCALITIES.— Badakshan (BMNH 1968.1301); Darrah-e-Andarab, vic. of Bani [Baghlan Prov., 2100 m] (ZFMK 9063, ZMK 2754); Faizabad (BMNH 1968.1302, ZFMK 96708–715, 97203–208, 97992; see also Fig. 9); Mazar-i-Sharif (FMNH 161109); 50 km E Taliqan (CAS 120737); 50 km NE Taliqan (CAS 120325) [see pl. 3, fig. 5 for distribution].



FIGURE 9: *Paralaudakia lehmanni* from Faizabad (Badakshan Province), Afghanistan. Photo by F. Joisten.

REMARKS.— Sindaco and Jeremčenko (2008) only provide records from northern and northeastern Afghanistan, however, the records from Darrah-e-Andarab are here confirmed by us.

***Paralaudakia microlepis* (Blanford, 1874:453)**

1874 *Stellio microlepis* Blanford, Descriptions of new lizards from Persia and Baluchistān. Annals and Magazine of Natural History, ser. 4, 13:453–455.

SYNTYPES.— BMNH 1946.8.28.74–77 “in montibus Persiae meridionalis” [invalidly restricted to Kushkizard, north of Shiraz by Boulenger 1885].

LOCALITIES.— 21 km N of Ghazni [by Kabul Rd.] (MVZ 237452–54); 50 km N Hirat (RMNH 25966); Murghab (ZFMK 8599, 8604); 6 km E Nawar Pass (RMNH 25959–61); Noburtscha, on road to Dascht-i-Nawar [Prov. Ghazni, 2400 m] (ZFMK 8605–06); Paghman, nr. Kabul (ZFMK 8598); 75 km E Shindand (RMNH 25965); 40 km S Tarin Kot (RMNH 25953) [see pl. 3, fig. 6 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) mention records only from central and eastern Afghanistan whereas our specimens confirm its occurrence in western parts of the country as well.

***Phrynocephalus clarkorum* Anderson and Leviton, 1967:228, fig. 1**

1967 *Phrynocephalus clarkorum* Anderson and Leviton, A new species of *Phrynocephalus* (Sauria: Agamidae) from Afghanistan, with remarks on *Phrynocephalus ornatus* Boulenger. Proceedings of the California Academy of Sciences, ser. 4, 35(11):227–234.

HOLOTYPE.— CAS 97989 (female), from “20 miles southeast of Kandahar, Afghanistan, 31°20'N, 65°50'E.”

LOCALITIES.— 10 km NE of Darweshan (CAS 120211–16); 56 km S and 10 km E of Darweshan (CAS 120217–24); btw. Nushki (Pakistan) and Helmand (BMNH 1946.8.28.22, BMNH 1946.8.28.25); 20 mi SE Kandahar [31°20'N, 65°50'E] (CAS 97989, CAS 103787); 40 km SE of Kandahar (CAS 120225–38); 5 km (by air) of Takhteh Pol (Rigestan Sand Dunes at W side of Kadeney Rud [river]), ca. 40 km SSE Kandahar (by road to Quetta) [3350 ft.] (MVZ 236886–88) [see pl. 3, fig. 7 for distribution].

REMARKS.— This species is endemic to firm sand pockets and dune margins of deserts in southern Afghanistan. Clark (1990) also reported it as occurring in sympatry with its close relative, *P. ornatus*.

***Phrynocephalus euptilopus* Alcock and Finn, 1897:556, pl. XII**

1897 “1896” *Phrynocephalus euptilopus* Alcock and Finn, An account of the Reptilia collected by Dr. F.P. Maynard, Captain A.H. McMahon, C.I.E., and the members of the Afghan-Baluch Boundary Commission of 1896. *Journal of the Asiatic Society of Bengal* 65:550–566, pls. XI–XV.

SYNTYPES.— BMNH 1946.8.28.39, ZSI 14070, ZSI 14072; MCZ R-7227 [ex ZSI 14074], from “near Darband, elevation 3000 feet” northern Balochistan.

LOCALITIES.— 56 km S and 10 km E of Darweshan (CAS 120205–07) [see pl. 3, fig. 8 for distribution].

REMARKS.— This species occurs exclusively in deep dune areas (Clark 1990). Sindaco and Jeremčenko (2008) provide a record from the Pakistani side of the border, which corresponds to the type locality Darband in northern Balochistan.

***Phrynocephalus interscapularis sogdianus* Chernov, 1948:135**

1948 *Phrynocephalus interscapularis sogdianus* Chernov, Reptiles—Reptilia. Pages. 127–161 *In* Pavlovsky, E.N. and B.S. Vinogradova, eds., *The Animals of the USSR. Vol. 2. The Desert Zone* [in Russian]. USSR Academy of Sciences, Moscow-Leningrad.

HOLOTYPE.— ZISP 16887, from “Tajikistan, vicinity of the Pjandzh village” [translated from Russian].

LOCALITIES.— Ag Chah (SNM 21–34); Andkhoy (CAS 120107–10); Anhoy, 25 km E of (USNM 194972); 20–32 km S of Andkhoy (CAS 120095–106); btw. Aqtchah and Andkhoy (MNHN 1948.169–70); Imam Sahib, nr. Amu-Darya [Kundus Prov.] (ZFMK 8691–93); Dasht-e Leila, nr. Seberghan [Djauz-Djan Prov., 390 m] (ZFMK 20976–79, ZMK 2613); 20 km E of Mazar-i-Sharif (CAS 120061–78); 30 km NW of Sheberghan (CAS 120079–94); Qizil Qala, nr. Amu-Darya [Kundus Prov., 400 m] (ZFMK 8581–82) [see pl. 4, fig. 1 for distribution].

REMARKS.— Clark (1990) mentioned this lizard from non-sandy areas, hiding among clumps of coarse grasses.

***Phrynocephalus luteoguttatus* Boulenger, 1887:497**

1887 *Phrynocephalus luteoguttatus* Boulenger, *Catalogue of the Lizards in the British Museum (Natural History) Vol. III. Lacertidae, Gerrhosauridae, Scincidae, Anelytropsidae, Dibamidae, Chamaeleontidae*. Trustees of the British Museum (Natural History), London, United Kingdom. xii + 575 pp., pls. I–XL.

SYNTYPES.— BMNH 1946.8.28.44–49, BMNH 1946.8.28.36–38, and ZISP 7363 [ex BMNH specimen], from “between Nushki and Helmand.”

LOCALITIES.— 12 km SE (by air) of Daruishan (Rigestan Sand Dunes) (2350 ft.) (MVZ 236904–10); 10 km NE of Darweshan (CAS 120008–25); 35 km S of Darweshan (CAS 120001–07); 56 km S and 10 km E of Darweshan (CAS 120026–48); 20 mi SE Kandahar [31°20'N, 65°50'E] (CAS 97980, CAS 103786); 48 km SE of Kandahar (CAS 120049–60); 5 km (by air) of Takhteh Pol (Rigestan Sand Dunes at W side of Kadeney Rud [river]), ca. 40 km SSE Kandahar (by road to Quetta) [3350 ft.] (MVZ 236889–903) [see pl. 4, fig. 2 for distribution].

REMARKS.— Clark (1990) mentioned the species as abundant in the sand desert margins of Darweshan and Kandahar. Sindaco and Jeremčenko (2008) provide an additional record from the

Sistan area, but this is in error because of wrong coordinates (Sindaco, pers. comm. Nov. 2013), whereas the original records refer to Helmand Province (Boulenger 1889).

***Phrynocephalus maculatus maculatus* Anderson, 1872:389**

1872 *Phrynocephalus maculatus* Anderson, On some Persian, Himalayan, and other Reptiles. Proceedings of the Zoological Society of London 1872:371–404.

HOLOTYPE.— ZISP 4825, from “Awada, Shiraz, Persia.”

SYNONYMS.— *Phrynocephalus spiniventris* Nikolskii, 1896 from “Persia oriental.”

LOCALITIES.— 1/2 hr S Dareweshan (CAS 147437); 10 km NE of Darweshan (CAS 120209); 56 km S and 10 km E of Darweshan (CAS 120208); Dasht-e-Margo, 70 km NE of Zarandj [Nimruz Prov.] (ZMK 2601); estuary of the Farah-ruds River (ZMUC R-36133); estuary of the Farah-ruds River (ZMUC R-36134); 40 mi W Lashkaragah [Dashtimargo] (CAS 147420) [see pl. 4, fig. 3 for distribution].

REMARKS.— Boulenger (1889:97) mentioned several specimens of “*Phrynocephalus maculatus*” and figured one (pl. 9, fig. 3) from the “great gravel plains between Nushki and the Helmand” that is probably a member of the series BMNH 1886.9.21.59–61.

***Phrynocephalus mystaceus galli* Krassowsky, 1932:225**

1932 *Phrynocephalus mystaceus galli* Krassowsky, Beitrag zur Systematik von *Phrynocephalus mystaceus* (Pall.). Zoologischer Anzeiger 97:225–228.

LECTOTYPE.— ZMMU Re–6413, from “Aus Repeteka andetriff” [= vicinity of Repetek station, approximately 38°35'N, 63°11'E, Lebapsky Region, Turkmenistan] designated by Semenov and Shenbrot (1990)

LOCALITIES.— Ag Chah [Mazar-i-Sharif Prov.] (SNM 35–40); 32–50 km S Andkhoy (CAS 120723–28); 50 km S of Andkhoy (CAS 120140); btw. Aqchah and Andkhai (MNHN 1948.168); 20 km E of Mazar-i-Sharif (CAS 120141, CAS 120729); 30 km NW of Sheberghan (CAS 120139) [see pl. 4, fig. 4 for distribution].

REMARKS.— Clark (1990) mentioned this species as abundant in northern Afghan deserts.

***Phrynocephalus ornatus ornatus* Boulenger, 1887:496**

1887 *Phrynocephalus ornatus* Boulenger, Catalogue of the Lizards in the British Museum (Natural History) Vol. III. Lacertidae, Gerrhosauridae, Scincidae, Anelytropsidae, Dibamidae, Chamaeleontidae. Trustees of the British Museum (Natural History), London, United Kingdom. xii + 575 pp., pls. I–XL.

LECTOTYPE.— BMNH 1946.8.28.20, from “between Nuski and Helmand” designated by Anderson and Leviton (1967).

LOCALITIES.— 12 km SE (by air) of Daruishan (Rigestan Sand Dunes) (2350 ft.) (MVZ 236913); 10 km N of Darweshan (CAS 120175–80); 32 km S of Darweshan (CAS 120165–74); 50 km S of Darweshan (CAS 120194–95); 56 km S and 10 km E of Darweshan (CAS 120196–203); Dibaram, 60 km Seranj (ZFMK 7930–32); 35 km S of Farah (CAS 120181–91); 18 km E of Girishk (CAS 120142–46); 20 mi E of Girishk [31°43' N, 64°45' E] (CAS 103788–90, CAS 97974–73); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84650–53, CAS 84660–62); 45 km N of Juwain (CAS 120192–93); Kandahar (BMNH 1964.1137–43); 65 km W (by Herat Rd.) of Kandahar (3320 ft.) (MVZ 236914–26); 30–75 km S of Lashkargah (CAS 120147–64); 50 km S of Lashkargah (CAS 120204); ca. 50 km SSW (by air) of Lashkar Gar (edge of Dasht-e Margo on W side of Helmund River) (2320 ft.) (MVZ 236912); between

Nushki and Helmand (ZISP 7362, paralectotype); Yaktchal [= Yakhchal] (MZLU L958/3241) [see pl. 4, fig. 5 for distribution].

REMARKS.— Clark (1990) mentioned this species as very abundant and could not identify any ecological difference between this species and its close relative *P. clarkorum*. Both species occur mainly on firm sandy terrain. *Phrynocephalus ornatus* seems to be less sand dependent than *P. clarkorum* and was also recognized from local sandy tracts. Golubev (1998) only mentioned the typical subspecies from Afghanistan but suggested the presence of *P. ornatus vindumi* in western parts of the country (see list below). Boulenger (1889:97) mentioned several specimens of “*Phrynocephalus ornatus*” from “between Nushki and the Helmand” (12 specimens) and “along the Helmand” (two specimens), the latter could refer to BMNH 1886.12.12.3–4.

***Phrynocephalus raddei* Boettger, 1888:262**

1888 *Phrynocephalus raddei* Boettger, Über die Reptilien und Batrachier Transcaspiens. Zoologischer Anzeiger 11:259–263.

LECTOTYPE.— SMF 10247 from “Perewalnaja an der transcaspischen Bahn [= Perevalnaja railroad station, southwestern Turkmenistan]” designated by Mertens (1967).

SYNONYMS.— *Phrynocephalus raddei* var. *bilkewitschi* Nikolskii, 1915 from “Kelifa”; *Phrynocephalus raddei* var. *zardunyi* Nikolskii, 1915 from “Kelifa”; *Phrynocephalus raddei* var. *boettgeri* Bedriaga in Nikolskii, 1905 from “Schirabad.”

LOCALITIES.— Ag Chah [Mazar-i-Sharif Prov.] (SNM 41–53); 10 km SE of Andkhoy (CAS 120133–38); 20 km E of Mazar-i-Sharif (CAS 120116–22); 30 km NW of Sheberghan (CAS 120123–28); between Sheberghan and Andkhoy (CAS 120129–32); 10 km W of Tashkurgan (CAS 120111–15) [see pl. 4, fig. 6 for distribution].

REMARKS.— The Afghan specimens mentioned here were previously identified as *P. raddei boettgeri* von Bedriaga, 1906 or *P. reticulatus boettgeri*. But recently, Barabanov and Ananjeva (2007) treated *P. raddei boettgeri* as a synonym of *P. raddei*. Clark (1990) mentioned this species as typical inhabitant of firm to loess clay in non-sandy steppe regions in northern Afghanistan.

***Phrynocephalus scutellatus* (Olivier, 1807:196 [octavo ed.], 110 [quarto ed.], pl. 42, fig. 1 [Atlas])**

1807 *Agama scutellata* Olivier, Voyage dans l’Empire Othoman, l’Egypte et la Perse, fait par ordre du Gouvernement, pendant les six premières années de la République, octavo edition, Tome Cinquième. H. Agasse, Paris, France. (4) + xv + 458 + (1) pp. and 1807 *Agama scutellata* Olivier, Voyage dans l’Empire Othoman, l’Egypte et la Perse, fait par ordre du Gouvernement, pendant les six premières années de la République. quarto edition. Tome Troisième. Henri Agasse, Paris, France. vii + 566 + (11) pp.; 1807 *Agama scutellata* Olivier, Atlas pour servir au Voyage dans l’Empire Othoman, l’Egypte et la Perse, fait par ordre du Gouvernement, pendant les six premières années de la République. Toisième Livraison. H. Agasse, Paris, France. viii pp., pls. 34–50.

HOLOTYPE.— MNHN 6947, from “au pied de la montagne (nommée Sophia ou Sophissar, en vue d’Ispahan) [= Mt. Sophia, near Esfahan, Esfahan Province, Iran].”

SYNONYMS.— *Phrynocephalus tickelii* Gray, 1845 from “Afghanistan.” *Phrynocephalus olivieri* var. *brevipes* Nikolskii, 1906 from “Naim-abad [Damysan] in Chorosano occidentale; Descht-i-Kewir; Dshandak in Kuchistano occidentale”. *Phrynocephalus olivieri* var. *carinipes* Nikolskii, 1906 from “Pudschk-Kupa; Dschandak in Kuchistano occidenatli”.

LOCALITIES.— Btw. “Cia-i-Baloch [= Robat-i-Shah Baloch] and Cia-i-Lagun, camp 1” (MZUF 24006–12); btw. Ghazni and Mukur [32°53’N, 67°48’E] (CAS 97992); 35 mi downstream from

Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84654–59, CAS 84663–68); btw. Ghazni and Dasht-e-Nawar (ZFMK 41341); 20 mi SE of Kandahar [31°23'N, 65°53'E] (CAS 97978–79); 32 km N of Kandahar (CAS 120210); 35 mi NW Kandahar, on desert plain just east of Helmand River (CM 49545–47); N edge of village of Kara Bagh (CAS 97992, CAS 90794, CAS 90796–7); Seistan [Faizabad Prov.] (ZMUC R-36207) [see pl. 4, fig. 7 for distribution].

REMARKS.— Boulenger (1889:96) mentioned 22 specimens of “*Phrynocephalus olivieri*” from “Nushki to Helmand” and six from “Helmand.” Bauer and Adler (2003) provided bibliographic details for Olivier’s “Voyage.” The quarto and octavo versions of the work were apparently published simultaneously and a single version of the “Atlas” complemented both text editions.

***Trapelus agilis agilis* (Olivier, 1804:394 [octavo ed.], 1804:428 [quarto ed.], pl. 29, fig. 2 [Atlas])**

An XII (1804) *Agama agilis* Olivier, Voyage dans l’Empire Othoman, l’Egypte et la Perse, fait par ordre du Gouvernement, pendant les six premières années de la République, octavo edition, Tome Quatrième. H. Agasse, Paris, France. iv + 456 + (1) pp. and An XII (1804) *Agama agilis* Olivier, Voyage dans l’Empire Othoman, l’ordre du Gouvernement, pendant les six premières années de la République, quarto edition. Tome Second. Henri Agasse, Paris, France. ii + 466 + (1) pp.; An XII (1804) *Agama agilis* Olivier Atlas pour servir au Voyage dans l’Empire Othoman, l’Egypte et la Perse, fait par ordre du Gouvernement, pendant les six premières années de la République. Deuxième Livraison. H. Agasse, Paris, France. vii pp., pls. 18–33.

SYNTYPES.— MNHN 5708 (2 ex), from “neighborhood of Baghdad [translated from French],” Iraq.

SYNONYMS.— *Agama isolepis* Boulenger, 1885 from “between Bampur and Magas, Iran”. *Agama kirmanensis* Nikolskii, 1899 from “Kurin, Kerman Province, Iran”. *Agama kirmanensis* var. *brevicauda* Nikolskii, 1907 from “Kochrud, Irak-Adschemi, Iran.”

LOCALITIES.— Ab-i-Istada (ZFMK 5376); 20 km SE Andkhoy (CAS 120272); 50 km S of Andkhoy (CAS 120269–71); 25 km SW of Aqcha (CAS 120263–66); Aqtscha [Djauz-Djan Prov., 500 m] (ZFMK 8590–91); btw. Aqtscha and Anakhoi (MNHN 1948.165–66); Bala Murghab, Herat province (Brück 1968); Bala Murghab, confluence of Darya-i-Murghab and Darya-i-Chapchel Rivers (MMB 28471, 2 ex.); Baqrabad (ZMUC R-36146–48, 36157); btw. “Cia-i-Baloch [= Robat-i-Shah Baloch] and Cia-i-Lagun, camp 1” (MZUF 24030–36); btw. Chuagat and Dukot [?] (ZFMK8594–97); Dahlah (MZLU L958/3239); 10 km NE of Darweshan (CAS 120280–81); 35 km S of Darweshan (CAS 120552); 56 km S and 10 km E of Darweshan (CAS 120281); Faisabad (ZMUC R-36160–61, 36133, 36204–05); Faisabad, Kobt af indjodle (ZMUC R-36149); 20 mi E of Farah [32°20'N, 62°15'E] (CAS 96271); 30 km S Farah (CAS 120245); Farah-ruds Udlot (ZMUC R-36145, 36158–59); Ghazni (Smith 1940: 384; probably BMNH 1940.3.1.19–24); 30 km S Ghazni (CAS 120276–77); 20 mi E of Girishk [31°43'N, 64°45'E] (CAS 97972, CAS 97975, FMNH 161117–19); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84640–47); 50 km E of Girishk (CAS 120240–41); Herat (ZISP 7361); Helmand (BMNH 86.9.21.17–18, BMNH 86.9.21.23–25); 30–70 km E of Herat (CAS 120246–50); Herat town (ZFMK 92804–06); Herat area [34°20'N, 62°10'E] (CAS 115919); Herat to Islam Qala [34°22'N, 62°10'E to 34°47'N, 61°05'E] (CAS 98117–18); 20 km SE Islam Qala (CAS 120239); Egnen af Kabul (ZMUC R-36208–09); Kandahar (ZMUC R-36206); 20 mi SE Kandahar [31°23'N, 65°53'E] (CAS 97990); 40 km SE of Kandahar (CAS 120242–43); Jawzan, Seberghan, Dasht-e-Leila [390 m] (ZFMK 20980); 12 km S Lashkargah (CAS 120244); Maimaneh (MNHN 1948.164); Paghman vic [34°36'N, 68°56'E] (CAS 115921, FMNH 161191–92); Pirezada (ZMUC R-36306); 24–50 km S Qalat (CAS 120278–79); Seistan [Faizabad Prov.] (ZMUC R-36133, ZMUC R-36161, ZMUC R-36150–55, ZMUC R-36204–05);

Seistan [Baqrabad Prov.] (ZMUC R-36145–48); Sharisafa, 60 km NE of Kandahar (CAS 90762–75); 30 km NW of Sheberghan (CAS 120267–68); Slam Quala (MHNG 1591.20); Spin Buldak, 102 km SSE Kandahar (by Quetta Rd.) (MVZ 236939); 5 km (by air) of Takhteh Pol (Rigestan Sand Dunes at W side of Kadeney Rud [river]), ca. 40 km SSE Kandahar (by road to Quetta) (MVZ 236940); Seistan [Faisabad Prov.] (ZMUC R-36133); 10 km SSE Takhteh Pol (by Quetta Rd.) (MVZ 236933–37); nr Tarnak River, 75 km NE of Kandahar (CAS 90777); nr Tarnak River, 90 km NE of Kandahar (CAS 90765–66); Uden Merke (ZMUC R-36156); Zebak, 102.4 km on road E Faizabad (FMNH 161133) [see pl. 5, fig. 2 for distribution].

REMARKS.— Boulenger (1889:96) mentioned this species as “*Agama isolepis*” from “Nushki to Helmand” (five specimens), from “Helmand” (five specimens) and “north of Herat” (nine specimens).

Bauer and Adler (2003) provided bibliographic details for Olivier’s “Voyage”. The quarto and octavo versions of the work were apparently published simultaneously and a single version of the “Atlas” complemented both text editions.

This is probably the most ubiquitous agamid lizard in Afghanistan (Fig. 10) and most typically is an inhabitant of semi-desert plains with some vegetation. Clark (1990) mentioned it as tolerating extremely high temperatures and being active during the hottest part of the day with ground surface temperatures higher than 60°C. *Trapelus agilis* was previously reported as occurring throughout the entire country, except for the Kabul Valley River system (Clark 1990). However, many of these records may actually refer to *T. sanguinolentus* inasmuch as Rastegar-Pouyani (2005) differentiated two subspecies, *T. a. agilis* and *T. a. sanguinolentus*, as present in Afghanistan. However, as do many other authors, we consider the latter taxon as a full species (see below).



FIGURE 10: *Trapelus agilis* from Tobagay, Afghanistan. Photo by R. Masroor.

***Trapelus megalonyx* Günther, 1864:159, pl. XIV, fig. C**

1864 *Trapelus megalonyx* Günther, The Reptiles of British India. The Ray Society, London, United Kingdom. xxvii + 452 pp, 26 pls.

HOLOTYPE.— BMNH 1946.8.11.34, from “Eastern Afghanistan”.

SYNONYMS.— *Agama ruderata baluchiana* Smith, 1935 from “Quetta District, Baluchistan”.

LOCALITIES.— Baraki Barak (USNM 194979); Char-e-Kar nr. Kabul (CAS 96234–44, ZFMK 13317–19); Feyzabad (see Fig. 11); Ghazni, Qa-la-Baqaul [2300 m] (ZFMK 54797–800); 31 km N Ghazni (by Kabul Rd.) (8100 ft.) (MVZ 236947–48, 23650–51); vic. of Jalalabad (Brück 1968); vic. Jalalabad in direction to Somarkhel (MMB 28473); Kabul (ZFMK 54801, ZFMK 15694); Kabul, Chairkana [1740 m] (ZFMK 20982); Kabul, Koh-el-Tschel Zetun (ZFMK 20981); Kabul, Logar Valley, 10 km S of Kabul [2000 m] (ZFMK 54802); 70–80 km S Kabul (CAS 120547–50); 71 km SSW Kabul (by Kandahar Rd.) (6230 ft.) (MVZ 236949, 236952); Kapua, Dargh-e-Nedjrab near Nedjrab [2000 m] (ZFMK 54803); Karisimia (ZFMK 7926–29); Kotal-e-Khair-Khana (ZFMK 8589); Orozgan (MZLU L960/3046); 50 km S Qalat (CAS 120551); Qala Nau, just N of Ghazni [“33°35’N, 68°28’E”] (CAS 97991) [see pl. 5, fig. 3 for distribution].

REMARKS.— Specimens of this species were previously reported from Afghanistan as *T. ruderata* or *T. ruderata baluchiana* by e.g., Brück (1968), Král (1969), Clark and Clark (1969) and Leviton and Anderson (1970). Clark (1990) noted that it prefers barren habitats. Smith (1940) mentioned “*Agama ruderata*” from “Ghazni 7000 ft.” that probably refers to BMNH 1934.3.1.14–17. Two numbers (ZFMK 8684–90) can be found in the collection catalogue of the Museum Koenig referring to *T. megalonyx* from Afghanistan and collected by Clas Naumann. As the labels are still unused and available in the catalogue, it seems that they had been reserved for a dona-



FIGURE 11: *Trapelus* aff. *megalonyx* from Feyzabad (Badakshan Province), Afghanistan. Photo by F. Joisten.

tion from the Zoological Museum in Kabul, but were never accessioned in the collection in Bonn.

***Trapelus sanguinolentus sanguinolentus* (Pallas, 1827:23)**

1827 *Lacerta sanguinolenta* Pallas, Zoographia Rosso-Asiatica, Sistens Omnium Animalium in Extensio Imperio Rossico et Adjacentibus Maribus Observatorum Recensionexu, Domicilia, Mores et Descriptiones, Anatomem atque Icones Plurimorum. Volumen Tertium [= Volume 3]. Typis Academiae Caesareae Scientiarum, Petropoli (= St. Petersburg). vii + 428 + cxxv pp., 6 pls.

TYPE(S).— Most probably lost; from the hilly country Kum-Ankatar at the Terek River in Caucasia [= Terek River Valley]; translated from Latin.

SYNONYMS.— *Agama aralensis* Lichtenstein, 1823 from “in dem ganzen Strich östlich vom Aralsee (= East of the Aral Sea),” Kazakhstan.

LOCALITIES.— Agtsha [Djanz-Djan Prov., 500 m] (ZFMK 8590–91); 64 mi by rd E Faizabad (CAS 115920, FMNH 161133); 25 km E Khanabad (CAS 120275); Khulm, Mazar-i-Sharif [700 m] (ZFMK 14320); Maimana [Maimana Prov.] (CAS 115922–23, FMNH 161197–99, FMNH 161201, ZFMK 8592–93); Mazar-e-Sharif (ZFMK 15693); 20 km E of Mazar-i-Sharif (CAS 120255–57, CAS 120274); 45 km W Mazar-i-Sharif (CAS 120258–60); 50 km W Mazar-i-Sharif (CAS 120273); 65–75 km W of Mazar-i-Sharif (CAS 120261–62); Pol Khomri (MNHN 1948.167); 25 km NW Pul-i-Khumri (CAS 120251); Qizil Qala [Kunduz Prov., 400 m] (ZFMK 8587); 10 km W of Tashkurgan (CAS 120252–54) [see pl. 5, fig. 4 for distribution].

REMARKS.— Boulenger (1889:96) mentioned one specimen of “*Agama sanguinolenta*” from “old Gulran” which probably refers to BMNH 1889.9.21.26.

Pallas, who was born in Berlin, Germany, sold most parts of his collection in 1795 to the Russian Academy of Sciences before he moved to the Crimea area, but some years later, in 1831, Johann Friedrich von Brandt (director of the zoological department at the time) was not able to trace this part of the Pallas collection and his specimens were not mentioned in publications of e.g., Eichwald, Strauch or Nikolskii. In 1810, when Pallas moved back to Berlin, he left parts of his collection in Crimea whereas other parts were donated to the Zoological Museum in Berlin. Therefore, only a few specimens of his collections, and especially very few of the type specimens, appear to have survived, and this has resulted in a cluster of taxonomic problems with respect to many of the species he described.

The date of the work by Pallas has been contentious. The title page of the work indicates that the work was printed 1811–1813, but it is widely held that publication was not until 1831. This latter date is almost certainly incorrect as J.E. Gray cited details from the “Zoographia Rosso-Asiatica” in a work that went to press in October 1830 (Gray 1831). The date used here, 1827, is that suggested by Stresemann (1951).

Family Anguidae

***Pseudopus apodus apodus* (Pallas, 1775:435, pl. 9, fig. 1)**

1775 *Lacerta apoda* Pallas, *Lacerta apoda* descripta. Novi Commentarii Academiae Scientiarum Imperialis Petropolitanorum 19:435–454, pls. IX–X.

HOLOTYPE.— Most probably lost [but imaged in Pallas (1775)], type locality not given in original description, but according to Wermuth (1969) from “habitat in conuallibus herbidis deserti Naryn [= Naryn steppe] et ad Sarpam Kumam, Terekum fluuios”, probably based on Pallas (1776).

LOCALITIES.— Bala-Murglab (Boulenger 1889: 98, probably BMNH 1886.9.21.74–75); On road

to Bala-Murglab [Maimana Prov., 850 m] (ZFMK 8629); Doshi 2700 ft., N of Hindu Kush and Dana Ghon 2400 ft. (Smith 1940, probably BMNH 1938.2.4.10 and BMNH 1938.2.4.11); Gulran (Boulenger 1889:98, probably BMNH 1886.9.21.72); near Laman, SE of Qalah (MNHN 1948.175); Zebak, 102.4 km on road E Faizabad (FMNH 161121–22) [see pl. 5, fig. 5 for distribution].

Family Eublepharidae

? *Eublepharis afghanicus* Börner, 1976:10

1976 *Eublepharis afghanicus* Börner, Second contribution to the systematics of the southwest Asian lizards of the geckonid genus *Eublepharis* Gray 1827: materials from the Indian subcontinent. *Saurologica* (No. 2) 1976:1–15 + 22 unnumbered pages.

HOLOTYPE.— FMNH 161142, from “Jalabad [*sic*, = Jalalabad], Afghanistan”; *Paratype.*— AMNH 57594).

SYNONYMS.— *Eublepharis gracilis* Börner, 1974 (see Remarks) from an unknown locality [*nomen dubium*].

LOCALITIES.— Char-e-Kar [35°05'N, 69°10'E] (CAS 96245); Rig-Revan (cave) near Golbahar, 65 km N of Kabul (LC, Wettstein 1960); Jalalabad (FMNH 161142, MMB 28451–53); vic. of Jalalabad (Brück 1968); Kandahar (MZLU L959/3050); Khoast (CAS 133826); 5–10 mi ENE of Nimla, on old Kabul-Jalalabad rd, and about 10 mi SW of Balabagh [34°19'–21'N, 70°10'–15'E] (CAS 96212) [see pl. 5, fig. 6 for distribution].

REMARKS.— Afghan populations were described by Börner (1976) as “*Eublepharis afghanicus*” (see Fig. 12), which has subsequently often been recognized as a synonym or subspecies of *E. macularius* (e.g., Grismer *in* Estes and Pregill 1988). This taxon now seems to be distinct from *E. macularius*, but it must be clarified if the description was published according to the criteria of Article 8 of the International Code of Zoological Nomenclature (ICZN 1999). The diagnostic characters of *Eublepharis afghanicus* (*vide* Börner 1976) are: transversally enlarged lamellae under the toes tuberculated; first postmental always in contact with the first labial; body



FIGURE 12: “*Eublepharis afghanicus*” from an unknown locality. Photo by H. Seuffer.

pattern consists of transverse bands (in juveniles and adults) and spots (in subadults and adults); no sacral band; body pattern bands tend to a pentagonal, rhombic, or triangular shape (tip always pointed toward the tail) in adults, and to a rectangular shape in juveniles; body pattern bands never tend to converge; spots on occiput subcircular and/or confluent. In these characters it is similar to *Eublepharis fuscus* Börner (1981), which may also not be validly published under Article 8 of the code (ICZN 1999).

Two years before the description of *E. afghanicus*, Börner (1974) described *Eublepharis gracilis*, referring to a single female specimen from an unknown locality (obtained from pet trade) living at the Cologne Zoo. In a subsequent publication (Börner 1976), Börner mentioned, without any information about further material, the range of *E. gracilis* as “inner or coastal [*sic*] Afghanistan”. From the description, the only striking difference between the taxa, *afghanicus* and *gracilis*, is the lack of “body pattern bands” in the latter species. But as the holotype is most probably lost and no typical locality is given, this taxon needs a revision to clarify its status. Meanwhile, we recognize it as a *nomen dubium* and a likely synonym of *E. afghanicus*.

Family Gekkonidae

Agamura persica (Duméril, 1856:481)

1856 *Gymnodactylus persicus* Duméril, Description des reptiles nouveaux ou imparfaitement connus de la collection du Muséum d’Histoire Naturelle et remarques sur la classification et les caractères des reptiles. Deuxième Mémoire, Troisième, quatrième et cinquième familles de l’ordre des sauriens (Geckotiens, Varaniens et Iguaniens). Archives du Muséum d’Histoire Naturelle de Paris, 8:438–588, pls. XVII–XXIV.

SYNTYPES.— MNHN 6761 (two specimens), from “la Perse” [= Iran].

SYNONYMS.— *Agamura cruralis* Blanford, 1874 from “Bahi Kalat and Askan, Baluchistan”. The syntypes of *A. cruralis* are (*vide* Das et al. [1998]): ZSI 3487 from Ras Malan, Baluchistan; ZSI 3501 from Mand, Baluchistan; ZSI 6811 from Askan, near Bampusht, Baluchistan; ZSI 6812 from Zamoran, Nihing R., Baluchistan. The original description gives the type locality as “Gedrosia [= Balochistan]”, restricted to “Bahu Kalat and Askan, Baluchistan” [= Balochistan Province, north-western Pakistan] by Smith (1935:61). According to Constable (1949), an additional syntype is in the MCZ; however, this specimen (MCZ R-7136) is a syntype of *Agamura cruralis*, which is today a synonym of *A. persica*.

LOCALITIES.— Cha-i-Angir (CAS 84690–91); between “Cia-i-Baloch [= Robot-i-Shah Baloch] and Cia-i-Lagun, camp 1” (MZUF 24005); 50 km W Girishk (CAS 120282); Hassan Gilan (Djilan) [Hassan Gilan, between Delaram and Gereskh] (MZLU L957/3791); Helmand (ZISP 7360); north of Herat (Boulenger 1889: 95); Paghman (FMNH 161053–54) [see pl. 5, fig. 7 for distribution].

REMARKS.— Boulenger (1889:95) additionally mentioned several specimens of “*Agamura persica*” from “along the Helmand” (three specimens) and from “between the Hamun and Khusan” (four specimens).

Altiphylax levitoni (Golubev and Szczerbak, 1979:309, fig. 1)

1979 *Tropiocolotes levitoni* Golubev and Szczerbak, Novij vid roda *Tropiocolotes* Peters, 1880 (Reptilia, Sauria, Gekkonidae) iz Afghanistana [= New species of the *Tropiocolotes* Peters, 1880 genus (Reptilia, Sauria, Gekkonidae) from Afghanistan]. Dopovidi Akademiyi Nauk Ukrayins’koyi RSR Seriya B Heolohichni Khimichni ta Biolohichni Nauky 1979 (4):309–312.

HOLOTYPE.— CAS 120283, from “Afghanistan: Kabul 6000 ft. elevation” [translated from Russian and according to the museum label].

LOCALITIES.— Baraki Barak [Logar Prov.] (USNM 194601–4); Kabul (CAS 91613–14, 96214–17, 120283, 121035–44); Kabul Seh Carte (CAS 151212–13); Kabul, Cartehseh (CAS 151192); Kart-e-Tshahar [Kabul Prov., 1800 m] (ZFMK 8679–83); Oukak, Valle de Boum (MZLU L962/3731); nr. Paghman River, 10 km SW of Kabul (CAS 92339) [see pl. 5, fig. 8 for distribution].

REMARKS.— This species is only known from Afghanistan (Fig. 13). Specimens previously recognized as *Alsophylax pipiens* from Afghanistan are now considered as this species. We follow the proposed transfer of *A. levitoni*, type species of *Asiocolotes*, to *Altiphylax* (see Sindaco and Jeremčenko [2008] and Bauer et al. [2013]).



FIGURE 13: *Altiphylax levitoni* from Kabul. Photo by H. Seuffer.

***Bunopus tuberculatus* Blanford, 1874:454**

1874 *Bunopus tuberculatus* Blanford, Descriptions of new lizards from Persia and Baluchistan. Annals and Magazine of Natural History, ser. 4, 13:453–455.

LECTOTYPE.— BMNH 1946.8.22.84, from “Baluchistan”, SW Iran (lectotype designated by Szczerbak and Golubev 1986). *Paralectotypes.*— Das et al. (1998) referred to several “syn-types”, which have to be recognized as paralectotypes: ZSI 3428, 3429, 3431, all from “Baluchistan [= Balochistan Province, north-western Pakistan]”; ZSI 3432 from “Bahukelat, Baluchistan”; ZSI 3434 from “Nigau, Nurmashu, S.E. Persia”; ZSI 3436 from “Bampur, Baluchistan”; ZSI 3437 from “Persian Gulf”; ZSI 3458, 5271 from “Bahu Kalat, Baluchistan”; ZSI 3459 from “Isfandak, Baluchistan”; ZSI 5273–77 from “Pishin, Baluchistan”; ZSI 5278 from “Mand, Baluchistan”; ZSI 5279–80 from “Pishin, Baluchistan”. The original description gave the type locality as “Gedrosia Persiaque [in Baluchistan, north-western Pakistan]”. According to Constable (1949) another paralectotype is in the MCZ, however, no type of this species was traceable in this collection.

SYNONYMS.— *Bunopus gabrielis* Werner, 1936 from “Leb-eKal und Halwan, Persien”. *Bunopus biporus* Werner, 1938 from “Zierat, Baluchistan”.

LOCALITIES.— Baqrabad, Seistan (ZMUC R-34125–26); 10 km NE of Darweshan (CAS 120284); 56 km S and 10 km E of Darweshan (CAS 120286–87, CAS 121067); 35 km S of Farah (CAS

120285); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84690–92); Herat town (ZFMK 92807); Kandahar (FMNH 161248); Kash-Rud Valley near Lashi, Dasht-i-Margo [Nimruz Prov.] (ZMK 2619); Ghaomi-Faringi, approx. 20 mi S Mukur [32°38'N, 67°30'E] (CAS 96277); Lashkargah (CAS 151211); Pirzada (ZMUC R-34129–30); Uruzgan [Oruzgan], Kandahar (ZFMK 94893–94) [see pl. 6, fig. 1 for distribution].

REMARKS.— Boulenger (1889: 95) additionally mentions one specimen of “*Alsophylax tuberculatus*” from “down the Helmand between Hadj-ali and the Hamun,” which probably refers to BMNH 1886.9.21.9.

***Crossobamon eversmanni eversmanni* (Wiegmann, 1834:19)**

1834 *Gymnodactylus eversmanni* Wiegmann, Herpetologia Mexicana, seu descriptio amphibiorum novae hispaniae, quae itineribus comitis de Sack, Ferdinandi Deppe et Chr. Guil. Schiede im Museum Zoologicum Berolinense Pervenerunt. Pars prima, saurorum species. Lüderitz, Berlin. iv + 54 pp., pls. I–X.

HOLOTYPE.— ZMB 435, from “Agetema, Zentral-Asien” [= Agytme, Uzbekistan].

SYNONYMS.— *Crossobamon atropunctatus* Lichtenstein and von Martens, 1856 from “Tartarei”.

LOCALITIES.— 20 km S of Andkhoy (CAS 120297–301); 30 km NW of Sheberghan (CAS 120288–96, CAS 121070) [see pl. 6, fig. 2 for distribution].

REMARKS.— Clark (1990) suggested that this species is an obligate sand dweller.

***Crossobamon eversmanni lumsdeni* (Boulenger, 1887:479)**

1887 *Stenodactylus lumsdeni* Boulenger, Catalogue of the Lizards in the British Museum (Natural History) Vol. III. Lacertidae, Gerrhosauridae, Scincidae, Anelytropsidae, Dibamidae, Chamaeleontidae. Trustees of the British Museum (Natural History), London, United Kingdom. xii + 575 pp., pls. I–XL.

HOLOTYPE.— BMNH 86.9.21.8 [1946.8.23.51], from Afghanistan–Baluchistan frontier “between Nushki and Helmand”, N Balochistan. The type specimen is additionally figured in Boulenger (1889, pl. IX, fig. 1).

SYNONYM.— *Stenodactylus maynardi* Smith 1933 (syntype ZSI 13944) from “Baluchistan near the Afghanistan frontier”; syntype (most probably BMNH 1946.8.23.36) from the same locality.

LOCALITIES.— In Afghanistan only known from the two above mentioned imprecise localities. However, Aitchison (1889:95) explicitly mentions “in Northern Baluchistan” and therefore the type specimens were most probably collected in an area which is today Pakistan.

REMARKS.— The status of *Stenodactylus lumsdeni* Boulenger is still under discussion. Szczerbak and Golubev (1986, 1996) regarded it as closely related to *Crossobamon eversmanni*, whereas Anderson (1999), who examined the name bearing type, recognized it as conspecific with *B. tuberculatus*. Later, Bauer et al. (2013) again followed Szczerbak and Golubev (1986, 1996).

Leviton and Anderson (1970) and also Szczerbak and Golubev (1986, 1996) recognized *C. eversmanni* from northern Afghanistan (see above). However, Leviton and Anderson (1970) additionally mentioned *C. lumsdenii* and *C. maynardi* as distinct species from other localities in the country, whereas Szczerbak and Golubev (1996) recognized *C. lumsdenii* as a subspecies of *C. eversmanni* and *C. maynardi* as synonym of *C. lumsdenii*. As we follow Szczerbak and Golubev (1986, 1996) in their taxonomic concept, we summarize all localities known as *C. lumsdenii* and *C. maynardi* together under the specific subspecies *lumsdenii* of *C. eversmanni*.

***Cyrtopodion scabrum* (von Heyden, 1827:15, pl. 4, fig. 2)**

1827 *Stenodactylus scaber* von Heyden, Reptilien. Pages (1–2) +. 1–24, pls. 1–6 in Rüppell, E., ed., [1826–1828] Atlas zu Reise im nördlichen Afrika. Vol 1, Zoologie. H.L. Brönnner, Frankfurt am Main, Germany,

(6) + vi + (2) + 78 pp., 30 pls.; (2) + 55 pp., 36 pls.; (2) + 24 pp., 6 pls.; 47 + (3) pp., 12 pls.; (2) + 141 + (3) pp., 35 pls.

LECTOTYPE.— SMF 8180, from “aus der Gegend von Tor [= vicinity of Tor], an steinigem Orten [= in rocky areas]”, designated by Mertens (1967).

SYNONYM.— *Gymnodactylus brevipes* Blanford, 1874 (holotype ZSI 3465) from “Gedrosia (Baluchistán) [in north-western Pakistan]”. Synonymized with *Cyrtopodion kachhensis* (Stoliczka, 1872) by Szczerbak and Golubev (1986), who nonetheless mentioned that the holotype is intermediate between *C. kachhensis* and *C. scabrum*.

LOCALITIES.— Band-e-Kadjak, Kadjaki [Kandahar Prov., 1050 m] (ZMK 2737); Bost, vic. Lashkargah [Helmand Prov., 1000 m] (ZMK 2744–5); Dilaram (ZMUC R-34127); Jalalabad [34°26'N, 70°25'E] (CAS 115948); Kandahar [31°36'N, 65°47'E] (CAS 115946–47, FMNH 161226, FMNH 161249, FMNH 161251); Kandahar, 3 km SE (by Quetta Rd.) at junction with Kabul Rd. (3500 ft.) (MVZ 236959–64, 23672–74); Sharisafa, 60 km NE of Kandahar (CAS 90767); Khost, 1200 m (ZFMK 8669–70) [see pl. 6, fig. 3 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) also mapped a record from northwestern Afghanistan.

Cyrtopodion watsoni (Murray, 1892:68)

1892 *Gymnodactylus watsoni* Murray, The Zoology of Beloochistan and Southern Afghanistan. (Reptiles and Batrachia). Education Society's Press, Bombay, India, 83 pp.

TYPE(S).— Not located, from “Quetta”, Pakistan.

SYNONYMS.— *Gymnodactylus ingoldby* Procter, 1923 from “Ladha”, South Waziristan, Pakistan.

LOCALITIES.— Dar-e-Nur, vic. Shewrak [Nangarhar Prov., 1200 m] (ZMK 2583); Khost [32°21'N, 69°57'E, Paktia Prov.] (CAS 121045–53, CAS 96174–78, ZFMK 8669–71); Jalalabad (CAS 115948, FMNH 161165–66, FMNH 161168); Jalalabad, University ground (AFG 01–07, MMB 28456–57) [see pl. 6, fig. 4 for distribution].

REMARKS.— The species is known only from Afghanistan and Pakistan. Brück (1968) mentioned “*Gymnodactylus kachhensis kachhensis* Stoliczka, 1872” from “dem Gebiete um Djelalabad [vic. of Jalalabad]” referring to a specimen of the Jakeš collection. Inasmuch as *Cyrtopodion watsoni* was recognized as subspecies of “*Gymnodactylus kachhensis [sic]*” at this time and as no other specimens of *C. kachhensis* are known from Afghanistan, and as it is not possible to verify the identification because the whereabouts of the Jakeš collection is unknown, we refer this record to *C. watsoni*. However, there is also specimen catalogued as *C. kachhensis* in the BMNH collection (BMNH 1887.6.17.1) that seems to be referable to *C. watsoni*.

Hemidactylus cf. brookii Gray, 1845:153

1845 *Hemidactylus brookii* Gray, Catalogue of the Specimens of Lizards in the Collection of the British Museum. Trustees of the British Museum, London, United Kingdom. xxviii + 289 pp.

LECTOTYPE.— BMNH 1947.3.6.47 (formerly BM RR 1934.9.1.49 [.21.a]), from “Borneo”; designated by Mahony (2011).

LOCALITIES.— Kabul (ZFMK 8694–5) [Fig. 14; see pl. 6, fig. 5 for distribution].

REMARKS.— This species is not mentioned for Afghanistan by Sindaco and Jeremčenko (2008). The identity and distribution of true *H. brookii* remains problematic. Gray's types were from “Australia” and “Borneo.” The Australian locality has been dismissed as an error and Bornean populations have only recently been rediscovered (Das and Jensen 2006; Das and Sukumaran 2007), but it has been argued that the current population represents a different species than the type specimen (Kathriner et al. 2014). Current Bornean populations are conspecific with a

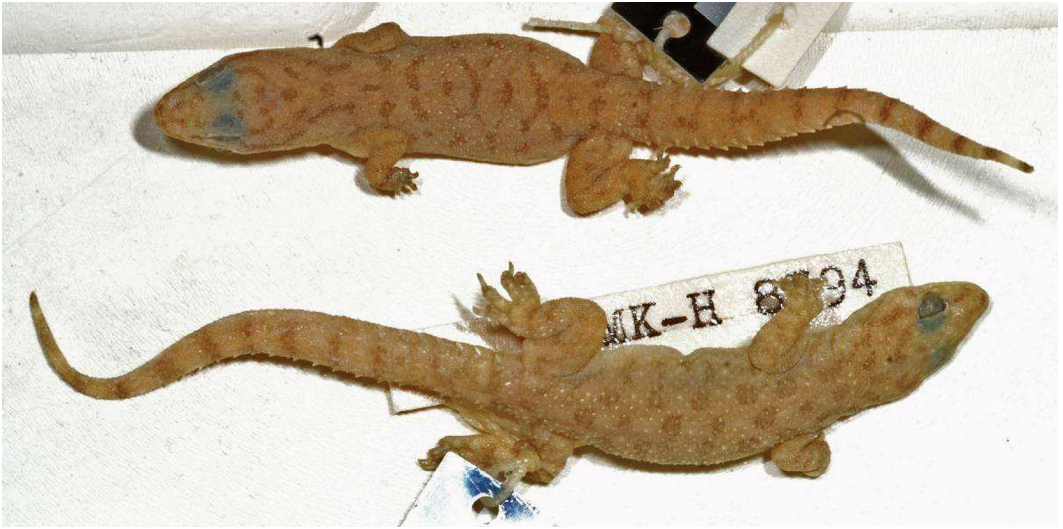


FIGURE 14: *Hemidactylus* cf. *brookii* from Kabul. Photo by P. Wagner.

H. brookii type gecko that occurs in India and in scattered localities from Myanmar eastwards to the Lesser Sundas (Bauer et al. 2010) which has most recently been identified as *H. murrayi* (Lajmi et al. 2016). Mahony (2011) resurrected several species occurring in South Asia from the synonymy of *H. brookii*, including *Hemidactylus gleadow*. Most of the currently recognized members of the *H. brookii* complex appear to have broad distributions within India and adjacent countries and it is likely that all or most have been established in parts of their ranges by human agency. Purely on the basis of proximity, *H. kushmorensis* most closely approaches Afghanistan, with populations in Kashmir, India (Lajmi et al. 2016) and presumably in adjacent northern Pakistan, although not in the Federally Administered Tribal Areas immediately adjacent to Afghanistan (Masroor 2012). However, this is still a gap of approximately 250 km and, as the Kabul specimens are likely representative of an introduced population (it seems inconceivable that such anthropophilic geckos would have been missed by earlier workers were they present in the capitol), the source population could be at any distance away. Additional morphological data as well as DNA samples will be needed to determine if the material from Kabul can be assigned to one of the currently recognized Pakistani or Indian taxa, or if it represents a so far undescribed species of the complex.

***Hemidactylus flaviviridis* Rüppell, 1835:18, pl. 6, fig. 2**

1835 *Hemidactylus flaviviridis* Rüppell, Amphibien. Pages 1–18. In Rüppell, E. (ed.), *Neue Wirbelthiere zu der Fauna von Abyssinien gehörig, entdeckt und beschrieben*. Vol. 3, Siegmund Schmerber, Frankfurt am Main, Germany. vi + 140, pls. 1–6.

LECTOTYPE.— SMF 8772 from, “Insel [= island] Massaua, Abyssinien [= Eritrea]”.

SYNONYMS.— *Hemidactylus coctaei* Duméril and Bibron, 1836 from “Bombay and Bengal”.
Boltalia sublevis Gray, 1842 from “India”. *Hemidactylus bengaliensis* Anderson, 1871 from “Bengal, India”.

LOCALITIES.— Jalalabad (AFG 09–10, CAS 115949–55, FMNH 161143, FMNH 161145–47, FMNH 161149, FMNH 161151–52, FMNH 161154, FMNH 161156, FMNH 161159–60, MMB 28463–64, ZFMK 8580); Jalalabad (Spinlar Hotel) (1950 ft.) (MVZ 236972–74); Jalalabad,



FIGURE 15: *Hemidactylus flaviviridis* from Jalalabad. Photo by G. Nogge.

bridge across Kabul River (MMB 28461); on road to Thor Khama, 8 km ESE of Jalalabad (MMB 28462) [Fig. 15; see pl. 6, fig. 6 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) also recognized this species from the Kabul area but it needs to be confirmed.

***Mediodactylus* aff. *spinicaudus* (Strauch, 1887:58, pl. 1, figs. 15–16)**

1887 *Alsophylax spinicauda* Strauch, Bemerkungen über die Geckoniden-Sammlung im zoologischen Museum der kaiserlichen Akademie der Wissenschaften zu St. Petersburg. Mémoires de l'Académie Impériale des Sciences de St. Pétersbourg, ser. 7, 35(2): (2), 1–72, 1 pl.

HOLOTYPE.— ZISP 4047 from, “Schahrud”, Iran.

LOCALITIES.— Dasht-e-Nawar (ZFMK 13323, see Fig. 16 for distribution).

REMARKS.— The specimen was identified as “*Cyrtopodion spinicauda*” by M. Golubev and would represent a first record of the species in Afghanistan. However the locality is far away from the known range of the species in Iran and Turkmenistan and a more detailed study of the specimen is in need to clarify its status.

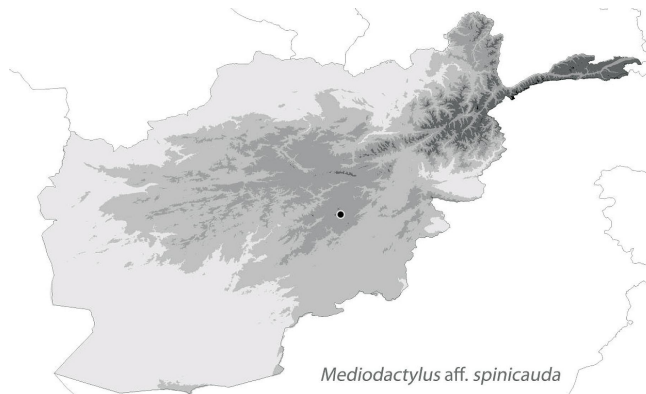


FIGURE 16: Distribution of *Mediodactylus* aff. *spinicaudus* in Afghanistan.

***Tenuidactylus caspius* (Eichwald, 1831:181)**

1831 *Gymnodactylus caspius* Eichwald, Zoologia Specialis quam Expositis Animalibus tum Vivis tum Fossilibus Potissimum Rossiae in Universum, et Poloniae in Specie, in usum Lectionum Publicarum in Universitate Caesarea Vilnensi Habendarum. Pars Posterior; Specialem Expositionem Spondylzoorum Continentis, Pars Posterior [= Vol. 3]. Josephi Zawadzki, Vilnae [Vilnius], Russia [now Lithuania]. (3) + 404 pp., 2 folding pls. (Decima Classis. Amphibia [pp. 116–197]. Explicatio Tabularum [pp. 395–396]. Index Generum [pp. 397–404]).

LECTOTYPE.— ZISP 3182, from “Baku” on the Caspian Sea in Azerbaijan.

SYNONYMS.— *Gymnodactylus caspius insularis* Akhmedov and Szczerbak, 1978 from “Island of Vulf, Caspian Sea” [translation from Russian].

LOCALITIES.— Ag Chah settlement [Mazar-i-Sharif Prov.] (SNM 01–05); 25 km SW of Aqcha (CAS 120327–29, CAS 121068); Bala-Murghab [Herat Prov.] (MMB 28454–55); mountains near Cia-i-Dudi [= Kuh-e Chah Dudi] (MZUF 24144); Herat to Islam Qala (CAS 97976); Mazar-i-Sharif (FMNH 161092–96, FMNH 161099–100, FMNH 161102–03, FMNH 161106–07); Paghām (FMNH 161063); 10 km W of Tashkurgan (CAS 120326); Tchachméh Cher, 17 km N of Pol-Khomri (NMW 15878); cave near Vaqíéh, 10 km from Sar-i Pul (MZLU L957/3792); Zebak, 64 mi by rd E Faizabad (CAS 115945, FMNH 161130) [see pl. 6, fig. 7 for distribution].

REMARKS.— Recently recognized as member of the genus *Tenuidactylus* by Bauer et al. (2013). Sindaco and Jeremčenko (2008) also recognize this species from “Neizar” on the Iran side of Sistan.

***Tenuidactylus turcomenicus* (Szczerbak, 1978:41, figs. 1–2)**

1978 *Gymnodactylus turcomenicus* Szczerbak, *Gymnodactylus turcomenicus* sp. n. (Reptilia, Sauria) - Novyj vid Gekkona iz Juzhnoj Turkmenii [= *Gymnodactylus turcomenicus* sp. n. (Reptilia, Sauria) - a new species of gecko from southern Turkmenia]. Vestnik Zoologii, Kiev 1978(3): 39–44.

HOLOTYPE.— ZIK Re No. 10, from Agashly near Kushka, Badkhyz, Turkmenistan [translated from Russian].

LOCALITIES.— Bala Murghab, Herat province (Brück 1968); 24 km E Khanabad (CAS 120318–21, CAS 121069); Kouh-Akhour near Farah (NMW 15879); Kunduz, 400–500 m (ZFMK 8579, 95004–14; ZMK 2758); btw. Kunduz and Tashqurghan [Kunduz Prov., 400 m] (ZFMK 8577); Mazar-i-Sharif [36°43'N, 67°05'E] (CAS 115940–44); Seistan [Faizabad Prov.] (ZMUC R-34128); Shiberghan [Djauz-Djan Prov., 500 m] (ZFMK 8578); 60 km NE Taliqan (CAS 120317) [Fig. 17; see pl. 6, fig. 8 for distribution].

REMARKS.— Recently recognized as member of the genus *Tenuidactylus* by Bauer et al. (2013). For comments on *Tenuidactylus fedtschenkoi* see list of doubtful or absent species at the end of this checklist (p. 524).

***Tenuidactylus voraginosus* (Leviton and Anderson, 1984:270, figs. 1A–E)**

1984 *Cyrtodactylus voraginosus* Leviton and Anderson, Description of a new species of *Cyrtodactylus* from Afghanistan with remarks on the status of *Gymnodactylus longipes* and *Cyrtodactylus fedtschenkoi*. Journal of Herpetology 18(3):270–276.

HOLOTYPE.— CAS 120322, from “55 km W Girishk,” Afghanistan. *Paratypes.*— CAS 120323 from “32km north of Kandahar”, CAS 97995 from “40 mi west of Chirishk; FMNH 161255–56 from “Kandahar”, FMNH 161076 from “30 mi west of Dilaram”.

LOCALITIES.— Chamchir ghar (Pandjvai), 25 km SO of Kandahar (MZLU L958/3791); Cave Khadjah [Kouh-Siah Pochtéh, Naouzan Guerechk] (MZLU L958/3792); 40 mi W of Ghirishk

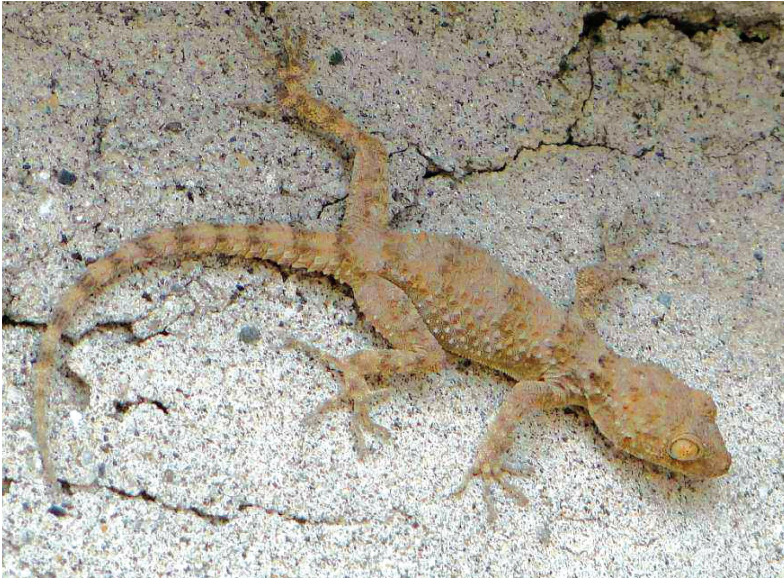


FIGURE 17: *Tenuidactylus turemenicus* from Feyzabad. Photo by F. Joisten.

[32°00'N, 64°10'E] (CAS 97995); 55 km W Girishk (CAS 120322); Kandahar (FMNH 161076, 161255–56); 32 km N Kandahar (CAS 120323) [see pl. 7, fig. 1 for distribution].

REMARKS.— This species is endemic to Afghanistan and was recently recognized as member of the genus *Tenuidactylus* by Bauer et al. (2013).

Family Sphaerodactylidae

Teratoscincus bedriagai Nikolskii, 1900:146

1900 *Teratoscincus bedriagai* Nikolskii, Deux nouvelles espèces de *Teratoscincus* de la Perse orientale. Annuaire Musée Zoologique de l'Académie Impériale des Sciences de St. Pétersbourg, 4 [1899]:145–147.

LECTOTYPE.— ZISP 9157, from “Chadschi-du-i Tschaghi,” eastern Iran.

LOCALITIES.— 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84689); Kandahar [31°36'N, 65°47'E] (CAS 115957, FMNH 161252, FMNH 161254); 16 km S Qala-i-Kang [30°58'N, 61°54'E] (CAS 115956, FMNH 161032, FMNH 161034); 5 km (by air) of Takhteh Pol (Rigestan Sand Dunes at W side of Kadeney Rud) , ca. 40 km SSE Kandahar (by road to Quetta) (3350 ft.) (MVZ 236991–98); 10 km SSE Takhteh Pol (by Quetta Rd.) (3440 ft.) (MVZ 236999–7027) [see pl. 7, fig. 2 for distribution].

Teratoscincus keyserlingii Strauch, 1863:col. 480

1863 *Teratoscincus Keyserlingii* Strauch, Charakteristik zweier neuer Eidechsen aus Persien. Bulletin de l'Académie Impériale des Sciences de St. Pétersbourg, 6:477–480.

LECTOTYPE.— ZISP 2396, from “Seri-Tschah,” eastern Iran.

LOCALITIES.— Cia-i-Lagun (MZUF 24152); 10 km NE of Darweshan (CAS 120309–10); Delaram, Farah Rod [river] (MZUF 24143); 48 km W Dilaram [32°15'N, 62°50'E] (CAS 115960, FMNH 161079–81); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84648–49); 5 mi W Lashkarghah, Dashti-margo Desert (CAS 151220–22); 10 mi W Lashkar-

gah, Daschtimargo (CAS 147416–19); 56 km S and 10 km E of Darweshan (CAS 120311–14); 16 km S Qala-i-Kang (CAS 115958–59, FMNH 161028–30) [see pl. 7, fig. 3 for distribution].

REMARKS.— The correct assignment of this species in Afghanistan is complicated. Several authors mention the Afghan taxon as *T. keyserlingii* (e.g., Szczerbak and Golubev 1986, Sindaco and Jeremčenko 2008), a taxon first recognized as a subspecies of *T. scincus* and later as distinct species by Macey et al. (2005). However, Clark (1990) specifically mentioned the (at the time) nominate subspecies *T. scincus scincus* from Andkhoy (*q.v.*). Therefore, the correct status of this complex should be investigated. Alcock and Finn (1897) mentioned that Afghans believe that this species is poisonous.

***Teratoscincus microlepis* Nikolskii, 1900:145**

1900 *Teratoscincus microlepis* Nikolskii, Deux nouvelles espèces de *Teratoscincus* de la Perse orientale. Annuaire Musée Zoologique de l'Académie Impériale des Sciences de St. Pétersbourg, 4 [1899]:145–147.

HOLOTYPE.— ZISP 9164, from “Duz-Ab in Kirmano orientali,” in eastern Iran.

LOCALITIES.— 56 km S and 10 km E of Darweshan (CAS 120302–08); 5 km (by air) of Takhteh Pol (Rigestan Sand Dunes at W side of Kadeney Rud), ca. 40 km SSE Kandahar (by road to Quetta) (3350 ft.) (MVZ 237028–33) [see pl. 7, fig. 4 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) did not mention this species for Afghanistan.

***Teratoscincus scincus* (Schlegel, 1858:16)**

1858 *Stenodactylus scincus* Schlegel, Handleiding tot de Beoefening der Dierkunde, vols. 1 and 2. Naturkundige Leercursus ten gebruike der Koninlijke Militarie Akademie. Koninlijke Militarie Akademie (Hubert-G. Nys, printer), Breda [The Netherlands]. xx + 628 + (2) pp., pls. 1–27.

LECTOTYPE.— RMNH 245 from the “zandige oevers der Ili-rivier [Ilo River], ten oosten van Turkestan.” [Ili River Valley of Xinjiang Uygur, China *vide* Zhao and Adler 1993].

LOCALITIES.— 20 km S of Andkhoy (CAS 120315–16) [see pl. 7, fig. 5 for distribution].

REMARKS.— *Teratoscincus scincus* was mentioned by Szczerbak and Golubev (1986) from Harirud River near Herat referencing the record in Boettger (1888). Clark (1990) specifically mentioned *T. scincus scincus* from Andkhoy, stating that none of his other recognized *Teratoscincus* taxa had been mentioned for Afghanistan by Szczerbak and Golubev (1986). However, in the English version of the latter publication the record from Herat (Szczerbak and Golubev 1996:36) is mentioned as “in error in original, source unknown–MG”. This could be due to a citation error, as it is not Boettger (1888) but Boulenger (1889:94) who mentioned and figured (pl. IV, fig. 1) “*Teratoscincus scincus*” from “Hari-rud river near Tirphul” that probably refers to the specimen BMNH 1886.9.21.7. Moreover, the other mentioned Afghan localities now refer to *Teratoscincus keyserlingii* (*q.v.*). We have examined the specimens from Andkhoy and they clearly are referable to *T. scincus*. Therefore, we recognize both former subspecies as distinct species in Afghanistan.

Family Lacertidae

***Acanthodactylus blanfordii* Boulenger, 1918:154**

1918 *Acanthodactylus cantoris* var. *blanfordii* Boulenger, Sur les lézards du genre *Acanthodactylus* Wieg. Bulletin de la Société zoologique France 43: 143–155.

SYNTYPES.— BMNH 1946.9.3.54–55, from “Dash;” BMNH 1946.9.8.34, from “Mand;” BMNH 1946.9.8.33, from “Bam;” and BMNH 1946.9.8.43–44, from “Jask.”

LOCALITIES.— Chah-i-Angir, Dasht-i-Margo desert (CAS 84676, CAS 84678–79, CAS 84681–83); 10 km N of Darweshan (CAS 120364–66); 35 km S of Darweshan (CAS 120367–69); 56 km S and 10 km E of Darweshan (CAS 120371); Either [31°43'N, 64°45'E] or [31°23'N, 65°53'E] (CAS 97993); 10–18 km E of Girishk (CAS 120330–35); 20 mi E of Girishk [31°43'N, 64°45'E] (CAS 97970–71); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84676–83); 45 km N Juwain (CAS 120370); 20 mi SE Kandahar [31°23'N, 65°53'E] (CAS 97994, CAS 97977); 40 km SE of Kandahar (CAS 120336–57); 45–55 km S Lashkargah (CAS 120361–63); between Nushki and Helmand (BMNH 86.9.21.77–79) [see pl. 7, fig. 6 for distribution].

REMARKS.— Clark (1990) mentioned this species as commonly found on sandy pockets and fine drifted sand pits, but not in main dune areas or on stony terrain. Specimens were also collected on river sand banks and islets.

***Acanthodactylus cantoris cantoris* Günther, 1864:73**

1864 *Acanthodactylus cantoris* Günther, The Reptiles of British India. The Ray Society, London, United Kingdom. xxvii + 452 pp, 26 pls.

SYNTYPES.— BMNH 1946.8.4.15–20, from “Ramnagor” [Ramnagar, Gujranwala District, Punjab, India], Punjab, India.

LOCALITIES.— Jalalabad (FMNH 161164); Jalalabad, confluence of Surkh-rod and Kabul River (ZFMK 20984–5); 8 km ESE Jalalabad, direction to Sarsahi (MMB 28482); Jalalabad to Nimla (CAS 120358–60); 5–10 mi ENE of Nimla, on old Kabul-Jalalabad rd, and about 10 mi SW of Balabagh [34°19'–21'N, 70°10'–15'E] (CAS 96200–01, CAS 96206–09) [see pl. 7, fig. 7 for distribution].

REMARKS.— Boulenger (1889:99) mentioned six additional specimens from “Nushki to Helmand” and one specimen from “Helmand”. MMB 28482 was retrieved from the stomach of *Psammodphis leithii*.

***Eremias acutirostris* (Boulenger, 1887:114)**

1887 *Scapteira acutirostris* Boulenger, Catalogue of the Lizards in the British Museum (Natural History) Vol. III. Lacertidae, Gerrhosauridae, Scincidae, Anelytropsidae, Dibamidae, Chamaeleontidae. Trustees of the British Museum (Natural History), London, United Kingdom. xii + 575 pp., pls. I–XL.

HOLOTYPE.— BMNH 86.9.21.88 [now BMNH 1946.8.7.46] from “between Nushki and Helmand, Afghan-Baluch border region”, described in details and figured in Boulenger (1889:100, pl. IX, fig. 4 and 4a–c).

SYNONYMS.— *Scapteira aporosceles* Alcock and Finn, 1897, (syntypes BMNH 1917.3.6.40–43) from “West of Robat I.” Das et al. (1998) mention additional syntypes: ZSI 14132, 14134, 14137, 14139–42, 14144–45, 14147–51, 14153 from the same locality. However, Lantz (1928: 127) only mentioned six male syntypes.

LOCALITIES.— 12 km SE (by air) of Daruishan (Rigestan Sand Dunes) (2350 ft.) (MVZ 237048); 10 km NE of Darweshan (CAS 120377–85); 35 km S of Darweshan (CAS 120375–76); 56 km S and 10 km E of Darweshan (CAS 120386–88); 40 km SE of Kandahar (CAS 120389–96); 5 km (by air) of Takhteh Pol (Rigestan Sand Dunes at W side of Kadeney Rud), ca. 40 km SSE Kandahar (by road to Quetta) (3350 ft.) (MVZ 237044–47) [see pl. 7, fig. 8 for distribution].

***Eremias afghanistanica* Böhme and Szczerbak, 1991:137**

1991 *Eremias afghanistanica* Böhme and Szczerbak, Ein neuer Wüstenrenner aus dem Hochland Afghanistans, *Eremias (Eremias) afghanistanica* sp. n. (Reptilia: Sauria: Lacertidae). Bonner zoologische Beiträge 42(2):137–141.

HOLOTYPE.— ZFMK 8584, from “Ost-Afghanistan [East Afghanistan], Prov. Ghazni, Dasht-e-Nawar, 3000 m N.N.”

LOCALITIES.— Dasht-e-Nawar [Ghazni Prov.], 3000 m a.s.l. (ZFMK 8585); vic. of Kabul [Kabul Prov.], 2000 m a.s.l. (ZFMK 13320) [see pl. 8, fig. 1 for distribution].

REMARKS.— This species is endemic to Afghanistan and so far only known from the two mentioned specimens.

***Eremias aria* Anderson and Leviton, 1967:1, fig. 1**

1967 *Eremias aria* Anderson and Leviton, A new species of *Eremias* (Reptilia: Lacertidae) from Afghanistan. Occasional Papers of the California Academy of Science 64:1–4.

HOLOTYPE.— CAS 96204, from “5–10 mi ENE of Nimla, on old Kabul-Jalalabad rd, and about 10 mi SW of Balabagh [34°19′–21′N, 70°10′–15′E].” *Paratype.*— CAS 96205, same data as the holotype.

LOCALITIES.— 30 km SW Jalalabad (CAS 120372–73, CAS 121065); 5–10 mi ENE of Nimla, on old Kabul-Jalalabad rd, and about 10 mi SW of Balabagh [34°19′–21′N, 70°10′–15′E] (CAS 96204–05); Waziri (ZMK 2653) [see pl. 8, fig. 2 for distribution].

REMARKS.— This species has been recently recognized as endemic to Afghanistan. According to Clark (1990), it inhabits rocks and boulders on stony grounds, hiding amongst the base of intermixed vegetation.

***Eremias fasciata* Blanford, 1874:32**

1874 *Eremias fasciata* Blanford, Descriptions of new Reptilia and Amphibia from Persia and Baluchistan. Annals and Magazine of Natural History, ser. 4, 14:31–35.

LECTOTYPE.— ZMB 9329 (designated by Szczerbak 1974), from “Karman” [= Kerman], Iran.

LOCALITIES.— 56 km S and 10 km E of Darweshan (CAS 120397); 16 km NW Delaram (CAS 120400–04); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84684–88); 64 km W Kandahar (CAS 120398–99); Pirzada (ZMUC R-4594); Urgun [Paktia Prov., 2500 m] (ZFMK 8553) [see pl. 8, fig. 3 for distribution].

REMARKS.— Clark (1990) recognized *E. fasciata* as an inhabitant of isolated sandy pockets and wind-dispersed sandy areas away from the main sand deserts. Paralectotypes are e.g.: BMNH 1946.8.7.57–59, BMNH 1946.8.7.34–35 from “Saidabad, southwest of Kerman.” Lantz (1928) mentioned one specimen from “Afghanistan”, while Boulenger (1889: 99) mentioned an additional specimen from “on the Helmand” that probably refers to BMNH 1886.9.21.87.

***Eremias grammica* (Lichtenstein, 1823:100)**

1823 *Lacerta grammica* Lichtenstein, Verzeichniss der Doubletten des zoologischen Museums der königlichen Universität zu Berlin nebst Beschreibung vieler bisher unbekannter Arten von Säugethieren, Vögeln, Amphibien und Fischen. Königlich Preussische Akademie der Wissenschaften, T. Trautwein, Berlin, Prussia [now Germany]. x + 118 pp., 1 pl.

LECTOTYPE.— ZMB 1095 (designated by Szczerbak 1974) from “Karakum, Turkmenistan”. *fide* Szczerbak (1974). Original locality “Aegypt., Nubia et Tataria.”

SYNONYMS.— *Scapteira persica* Nikolskii, 1900 from “Tscharachs, Zirkuch, Iran”.

LOCALITIES.— Ag Chah (SNM 06–14, SNM 20); 20 km S of Andkhoy (CAS 120438–39); 20–50 km S of Andkhoy (CAS 120418–37); 20 km E of Mazar-i-Sharif (CAS 120405–16); 30 km NW of Sheberghan (CAS 120417) [see pl. 8, fig. 4 for distribution].

***Eremias intermedia* (Strauch, 1876:28)**

1876 *Podarces (Eremias) intermedia* Strauch, Part III. Reptiles and amphibians. Pages 1–55, pls. I–VIII *In* Przewalski, N. Mongoliya i Strana Tangutov. Tryokhletneye puteshestviye v Vostochnoj Nagoruoij Asii [= Mongolia and the Tangut Country. Three-Years of Travel in Eastern High Asia]. Volume 2. Imperial Russian Geographic Society, St. Petersburg, Russia [in Russian; English edition, London 1876, French edition, Paris 1880, German edition, Jena 1887; abridged Russian edition with added notes, Moscow 1946].

LECTOTYPE.— ZISP [former ZIL] 3664, from “Kizil Kum, Aralo-Caspian Desert” [translated from Russian] (designated by Szczerbak 1974).

LOCALITIES.— Ag Chah (SNM 15–19); 20 km S Andkhoy, W of river (CAS 120641–42); 20–50 km S Andkhoy, E of river (CAS 120636–40); 50 km S of Andkhoy (CAS 121062); 25 km SW of Aqcha (CAS 120629–31, CAS 121061); 20 km E of Mazar-i-Sharif (CAS 120621–27, CAS 121059–60); 65–75 km W of Mazar-i-Sharif (CAS 120628); 30 km NW of Sheberghan (CAS 120632–35) [see pl. 8, fig. 5 for distribution].

REMARKS.— Clark (1990) mentioned the species as sympatric with *E. grammica* and *E. lineolata* but preferring firm sandy soils and shunning loose sands and dunes. Sindaco and Jeremčenko (2008) also provide records from northwestern Afghanistan.

***Eremias lineolata* (Nikolskii, 1897:330, pl. XVIII, fig. 4)**

1897 *Scapteira lineolata* Nikolskii, Les reptiles, amphibiens et poissons recueillis (part.) Mr. N. Zaroudny dans la Perse orientale [in Russian]. Annuaire Musée Zoologique de l’Académie Impériale des Sciences de St.-Petersbourg 2:306–348, pls. XVII–XIX.

LECTOTYPE.— ZISP 880, from between Feizabad and Nusi in eastern Iran [translated from Russian] (designated by Szczerbak 1974).

LOCALITIES.— 20–50 km S of Andkhoy (CAS 120441–52); 40–50 km S Andkhoy (CAS 120453–54); Aqtscha [Djauz-Djan Prov., 500 m] (ZFMK 8585); Bala Murghab (Brück 1968); 57–75 km W Mazar-i-Sharif (CAS 120440) [see pl. 8, fig. 6 for distribution].

REMARKS.— Clark (1990) reported this species as only associated with vegetation and never venturing far from cover.

***Eremias nigrocellata* Nikolskii, 1896:371**

1896 *Eremias nigrocellata* Nikolskii, Diagnoses reptilium et amphibiorum novorum in Persia orientali a N. Zarudny collectorum. Annuaire Musée Zoologique de l’Académie Impériale des Sciences de St.-Petersbourg, 1:369–372.

LECTOTYPE.— ZISP 8800, from “Sistan”, Iran (designated by Szczerbak 1974). However, Lantz (1928) referred to five syntypes (ZISP 8798–8799) and ZISP 8800 is only mentioned by him, but not indicated as type. Therefore, the status of the specimen ZISP 8800 should be investigated.

LOCALITIES.— Amu-Darya, N of Kunduz (ZFMK 8696); Dasht, btw. Kunduz and Khulm [Kunduz prov., 500 m] (ZFMK 8654, ZMK 2755–56); Amu-Darya swamps, nr. Darquad, N of Djangi Quala [Takhar Prov., 400 m] (ZMK 2562); Pul-e-Khumri [Baghlan Prov., 1300 m] (ZFMK 8583); 10 km W of Tashkurgan (CAS 120455, CAS 120619–20); 15 km W Tashkurgan (CAS

121058); Zebak, 102.4 km on road E Faizabad (FMNH 161127–29) [see pl. 8, fig. 7 for distribution].

REMARKS.— Clark (1990) mentioned *E. nigrocellata* as a rare species of open firm clay or loess ground with sparse vegetation. ZFMK 8696 was retrieved as a stomach content from *Eryx tataricus* (ZFMK 5385).

***Eremias persica* Blanford, 1875:31**

1874 *Eremias persica* Blanford, Descriptions of new Reptilia and Amphibia from Persia and Baluchistan. Annals and Magazine of Natural History, ser. 4, 14:31–35.

LECTOTYPE.— BMNH 1946.8.7.32, from “near Ispahan”, Iran (designated by Szczerbak 1974).

LOCALITIES.— Ab-e-Istada, vic. of Mugur [Ghazni Prov., 2000 m] (ZFMK 8655); Baqrabad (ZMUC R-4587); Char-e-Kar [35°05'N, 69°10'E] (CAS 96232–33); Cia-i-Baloch [= Robot-i-Shah Baloch] and Cia-i-Lagun, camp 1 (MZUF 24037–44, 24045–46, 24048–49); 10 km N of Darweshan (CAS 120610, CAS 120974); Faizabad (ZMUC R-4589); expiration of Farah-ruds River (ZMUC R-4586); Ghaomi-Faringi, approx. 20 mi S Mukur [32°38'N, 67°30'E] (CAS 96275–76, CAS 97986); 10 km S Ghazni (CAS 120612–13); 15 km N Ghazni (CAS 120611); Btw. Ghazni and Mukur [32°53'N, 67°48'E] (CAS 97981); 15 km W Girishk (CAS 120976–77); 22 km S Girishk (CAS 120975); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84677); Herat town (ZFMK 92808); vic. of Herat (MHNG 1590.16); 72 km S Herat (CAS 120616–18, CAS 120978); 10 km E Jalalabad, direction to Somarkhel (MMB 28481); 20 mi SE Kandahar [31°23'N, 65°53'E] (CAS 97988); 36–56 km N Kandahar (CAS 120606–09); 4 mi from Kurdkabul Dam towards Buthak (CAS 151228); Meiden Khula, about 30 mi ENE of Gardez [33°40' N, 69°50'E] (CAS 96255–56); Mokuk (CAS 133825); Murichaq [Herat Prov.] (MMB 28503); Paghām (FMNH 161064); 50 km N Qalat (CAS 120614–15); Sharisafa, 60 km NE of Kandahar (CAS 90772); 5 km (by air) of Takhteh Pol (Rigestan Sand Dunes at W side of Kadeney Rud), ca. 40 km SSE Kandahar (by road to Quetta) (3350 ft.) (MVZ 237049) [see pl. 8, fig. 8 for distribution].

REMARKS.— Smith (1940: 384) mentioned additional specimens from “Ghazni 7000 ft.”, which probably refer to BMNH 1940.3.1.25–33, and “Arbarp 7000 ft.”, which probably refers to BMNH 1940.3.1.34. This is a widespread species (Fig. 18) in southern Afghanistan, occurring up to at least 2500 m a.s.l. on open ground, hiding in holes, rodent burrows or at the base of vegetation (Clark 1990).



FIGURE 18: *Eremias persica* from Tobagay, Afghanistan. Photo by R. Maroor.

***Eremias regeli* Nikolskii, 1905:479**

1905 *Eremias regeli* Nikolskii, Herpetologia rossica. Mémoires de l'Académie Impériale des Sciences de St. Pétersbourg, Phys.-Math. Classe, St. Pétersbourg, 17(1):(1–2) + i–ii + 1–517 + (1), pls. I–II.

HOLOTYPE.— ZISP 6115, from “Shirabad”, Uzbekistan.

LOCALITIES.— 30 km SW Jalalabad (CAS 120374); 45 km W Jalalabad (CAS 121066); 5–10 mi ENE Nimla, on old Kabul-Jalalabad rd, ca. 10 mi SW Balabagh (CAS 121034, CAS 96198, CAS 96202–03, CAS 96211) [see pl. 9, fig. 1 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) also recognized this species from northern parts of the country.

***Eremias scripta scripta* (Strauch, 1867:col. 327)**

1867 *Podarces (Scapteira) scripta* Strauch, Bemerkungen über die Eidechsen-Gattung *Scapteira* (Fitz.). Bulletin de l'Académie Impériale des Sciences de St. Pétersbourg 12:313–328.

LECTOTYPE.— ZISP 3669, from “Aralo-Caspian desert” (designated by Szczerbak 1974).

LOCALITIES.— 10 km NE of Darweshan (CAS 120460–64); 35 km S of Darweshan (CAS 120456–59); 56 km S and 10 km E of Darweshan (CAS 120465–68); ca. 50 km SSW (by air) of Lashkar Gar, edge of Dasht-e Margo on W side of Helmund River (2320 ft.) (MVZ 237466); 40 km SE of Kandahar (CAS 120469–77); 81 km W (by Herat Rd.) of Kandahar (3200 ft.) (MVZ 237467).

REMARKS.— Clark (1990) mentioned this species as an inhabitant of permanent sand hills and ridges, usually occurring close to vegetation (see Fig. 19 for the distribution).

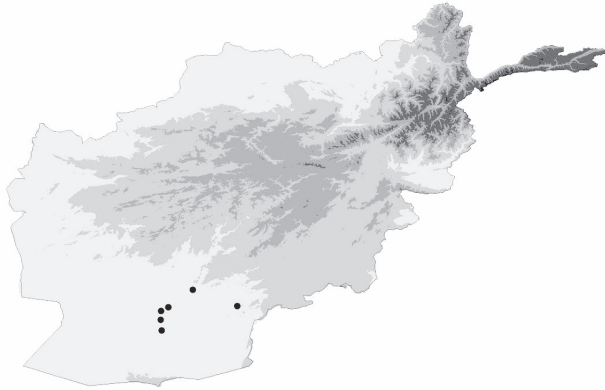


FIGURE 19: Distribution of *Eremias scripta* in Afghanistan.

***Eremias velox velox* (Pallas, 1771:407, 457)**

1771 *Lacerta velox* Pallas, Anhang. Descriptiones fugitiae animalium atque plantarum Annis 1768 et 1769 observatorum. Pages 453–504, 13 pls. *In* Reise durch verschiedene Provinzen des Rußischen Reiches, Erster Theil Kayserliche Academie der Wissenschaften, St. Petersburg, Russia. (12) + 504 pp., 26 pls.

NEOTYPE.— ZISP 16233, from the northern coast of Lake Inder, Inder district, Atyrau province, Kazakhstan (designated by Szczerbak 1974) [translated from Russian].

LOCALITIES.— 24 km SE Aqcha (CAS 120605); 25 km SW of Aqcha (CAS 120603–04); Baraki Barak [Logar Prov.] (USNM 194598–600, USNM 194978); Dasht-e-Nawar [Ghazni Prov., 3000 m] (ZFMK 8584); Doab (MNHN 1948.178); Herat (ZMUC R-4596); 24 km E Khanabad (CAS 120653); Kunduz (ZFMK 97438–39); 65–75 km W of Mazar-i-Sharif (CAS 120596–602, CAS

121063–64); 30 km E Taliqan (CAS 120654); 10 km W of Tashkurgan (CAS 120643–52, CAS 121057); Tazi, 80 mi N Kandahar [32°23'N, 67°18'E] (CAS 97984) [see pl. 9, fig. 2 for distribution].

REMARKS.— Boulenger (1889:99) mentioned additional specimens from “Helmand, Toman-agma, Gulran”, which probably refers to a locality in Iran. Clark (1990) mentioned this as a species occurring on firm, but never sandy, ground with scrub and vegetation. Sindaco and Jeremčenko (2008) noted this species only from northern parts of the country and specimens from southern parts need to be confirmed.

***Mesalina watsonana* (Stoliczka, 1872:86)**

1872 *Eremias (Mesalina) watsonana* Stoliczka, Notes on reptiles collected by surgeon F. Day in Sind. Proceedings of the Asiatic Society of Bengal 1872:85–92.

SYNTYPES.— BMNH 1946.8.7.75, ZSI 4929, ZSI 5050, ZSI 5223–25, and NMW 23474.1–3, from “Panjáb Province”.

LOCALITIES.— Armalik (MZLU L962/3177); Bagram, nr. Tsharikar [Parvan Prov., 2500 m] (ZFMK 8659); Baqrabad (ZMUC R-4588, 4590); Baraki Barak [Logar Prov.] (USNM 194963); Bozgholot, 21 km N of Ghazni (MZLU L960/3042); Cawkae dada, Ski Club Hill (CAS 147428–32); Chah-i-Angir, 35 mi downstream from Girishk, Dasht-i-Margo desert (CAS 84680); Chare-Kar [35°05'N, 69°10'E] (CAS 96218–31); Cia-i-Baloch [= Robot-i-Shah Baloch] and Cia-i-Lagun, camp 1 (MZUF 24047, 24072); Darreh-Darang (MZLU L962/3178); Djabir Ansar (MZLU L962/3179); Djaouz, Kouhqorough (MZLU L962/3175); vic. of Faizabad (ZMUC R-4591); Faizabad (ZMUC R-4592–93); Ghaomi-Faringi approx. 20 mi S Mukur [32°38'N, 67°30'E] (CAS 97985); 15 km N Ghazni (CAS 120576); 20 km W Ghazni (ZFMK 8656); 31 km N Ghazni (by Kabul Rd.) (8165 ft.) (MVZ 237478–79); 30 km E Girishk (CAS 120563); Hadda (MZLU L958/3229); 30–70 km NE of Herat (CAS 120578–86); 130 km S Herat (CAS 120559–62); Jalalabad [34°26'N, 70°25'E] (CAS 115961, FMNH 161170); 3 km SSE Jalalabad (MMB 28476–79); 8 km ESE Jalalabad, direction to Sarsahi (MMB 28475); 10 mi W of Jalabad [34°30'N, 70°22'E] (CAS 96240, 96189–94); 12 km ESE Jalalabad, direction to Sarsahi (MMB 28480); 25 km SW Jalalabad (CAS 120569–72); ca. 30 km SE (by air) Jalalabad (2950 ft.) (MVZ 237473–77); 35 km SW Jalalabad (CAS 120589); 35–45 km W Jalalabad (CAS 120565–68); Kabul (ZFMK 7923); Kabul to Lataband (CAS 120587–88); 30 km S Kabul (ZFMK 5387); 35 km S Kabul, on rd to Kandahar (CAS 91612); 80 km S Kabul (CAS 120590–92); Kandahar [31 36 N, 65 47 E] (CAS 115962–68, FMNH 161227, FMNH 161229, FMNH 161231, FMNH 161235–38, FMNH 161240–45, FMNH 161247); 20 mi SE Kandahar [31°23'N, 65°53'E] (CAS 97987); 32 km N Kandahar (CAS 120595); 40 km N Kandahar (CAS 120564, CAS 120575); 40 km NE of Kandahar, on Tarnak River (CAS 90757–60); 50 km NE of Kandahar, on Tarnak River (CAS 90758–60); 56 km N Kandahar (CAS 120573); 80 km W Kandahar (CAS 120574); Kharzar (Tang-Djangan Baz) (MZLU L957/3050); 30 mi W Khost [33°25'N, 69°22'E] (CAS 96173, CAS 96253); Kotal-e-Khair-Khana, vic. of Kabul [Kabul Prov., 2000 m] (ZFMK 8658); Kotal-Zarni (MZLU L962/3176); Mil-Karez, Pol-Mil (MZLU L958/3230); 5–10 mi ENE of Nimla, on old Kabul-Jalalabad rd, and about 10 mi SW of Balabagh [34°19'–21'N, 70°10'–15'E] (CAS 96213); 4 km S (by air) Paghman (7650 ft.) (MVZ 237471); Paghman River, 10 km SW of Kabul (CAS 92340); Paghman, 15 mi W of Kabul [34°36'N, 68°56'E] (CAS 96254); Qala-e-Bagaul, 5 km W of Ghazni [Ghazni Prov., 2300 m] (ZFMK 8657); 10 mi N Qalat [32°10'N, 67°00'E] (CAS 97982–83); 24–50 km N Qalat (CAS 120593–94); Qalat-Ghilzai (MNHN 1948.174); 32 km NE of Quandhor (MZLU L960/3043); Sharisafa, 60 km NE of Kandahar

(CAS 90764, CAS 90768, CAS 90770–71, CAS 90776); Shash Gao, few km toward Ghazni (CAS 91599–602); 10 km SSE Takhteh Pol (by Quetta Rd.) (3440 ft.) (MVZ 237472); Terra Pass, N of Gardez [Paktia Prov., 2500 m] (ZFMK 8660–61); Urgun [Paktia Prov., 2500 m] (ZFMK 8554–55); Yakhan (MZLU L962/3180) [see pl. 9, fig. 3 for distribution].

REMARKS.— Boulenger (1889: 99) mentioned two specimens as “*Eremias guttulata*” from “Helmand” and one specimen from “Tirphul” and “along the Helmand to the valley of the Hari-rud river”. The Afghan population of “*Eremias guttulata*” was later recognized as part of the subspecies *watsonana*, which today has species rank. Smith (1940:384) mentioned a specimen from “Arbarp” that may refer to BMNH 1940.3.1.35. A ubiquitous lizard inhabiting firm soils and hiding under stones, in holes or at the base of vegetation (Clark 1990).

Ophisops jerdonii Blyth, 1853:653

1854 “1853” *Ophisops jerdonii* Blyth, Notices and descriptions of various reptiles, new or little-known. Part I. Journal of the Asiatic Society of Bengal 22:639–655.

HOLOTYPE.— ZSI 2196, from “Mhow” [= Madhya Pradesh State, India].

LOCALITIES.— ca. 30 km SE (by air) Jalalabad (2950 ft.) (MVZ 237480–82); Jalalabad to Kaga (CAS 120479); Jalalabad to Nimla (CAS 120478, CAS 121056) [see pl. 9, fig. 4 for distribution].

REMARKS.— Clark (1990) mentioned the species as an inhabitant of broken terrain occurring amongst rocks and vegetation in Afghanistan.

Family Scincidae

Ablepharus grayanus (Stoliczka, 1872:74)

1872 *Blepharosteres grayanus* Stoliczka, Notes on the reptilian and amphibian fauna of Kachh. Proceedings of the Asiatic Society of Bengal 1872:71–85.

SYNTYPES.— NMW 10234, from “NE Katch” fide Tiedemann and Häupl (1980); ZSI 5403, from “Waggur district, in the North-eastern part of Kachh (in Gujarat State, western India)” fide Das et al. (1998).

LOCALITIES.— Loger Valley, 10 km S of Kabul [Kabul Prov., 2000 m] (ZFMK 8662) [see pl. 9, fig. 5 for distribution].

Ablepharus lindbergi Wettstein, 1960:61

1960 *Ablepharus bivittatus lindbergi* Wettstein, Contribution à l'étude de la faune d'Afghanistan. 3. Lacertilia aus Afghanistan. Zoologischer Anzeiger 165:58–63.

HOLOTYPE.— NMW 15877, from “Steppe einige km westl. v. Obéh [some km west of Obéh], östl. v. Hérat [east of Herat], W-Afgh[anistan].”

LOCALITIES.— Andarab [Baghlan Prov., 2500 m] (ZFMK 8586); Dasht-e-Nawur [Ghazni Prov., 3000 m] (ZMK 2655–57); 20km W of Ghazni [Ghazni Prov., 2500 m] (ZFMK 8665–67); Kotal, Zarni (MZLU L962/3170); Kotal-e-sh-tu [Maidan Prov., western Behsud, 2000 m] (ZFMK 8664); Masdjed, Tohoubi (MZLU L959/3044); Masgid-i-ciovi [= Masjed-e Chubi], Campo 2 (MZUF 23923–38, 24132–42); Obêh, E of Hérat (MZLU L957/3777, NMW 15877); Oukak, valle de Boum (MZLU L962/3171); Pandjab, Decht Ghoudjour (MZLU L962/3172); Tshomay [Maidan Prov., western Behsud, 2000 m] (ZFMK 8663); Urgun [Paktia Prov.] (ZFMK 8556); Yabowlang [= Yakawlang] to Band-i Ahair [= Band-e Amir] pass (MZUF 24154–61) [see pl. 9, fig. 6 for distribution].

REMARKS.— This taxon appears to be endemic to Afghanistan and can be differentiated from the closely related *A. bivittatus* by a higher number of scales around midbody (26 versus 22–24).

***Ablepharus pannonicus* (Lichtenstein, 1823:103)**

1823 *Scincus pannonicus* Lichtenstein, M.C.H., Verzeichniss der Doubletten des zoologischen Museums der königlichen Universität zu Berlin nebst Beschreibung vieler bisher unbekannter Arten von Säugethieren, Vögeln, Amphibien und Fischen. Königlich Preussische Akademie der Wissenschaften, T. Trautwein, Berlin, Prussia [now Germany]. x + 118 pp., 1 pl.

SYNTYPES.— ZMB 1346 [two specimens], from “Bucharia” [= Bukhoro, Uzbekistan].

SYNONYMS.— *Blepharosteres agilis* Stoliczka, 1872 (syntypes ZSI 5407, NMW 16237) from “S. W. of Kálábágh [in North-West Frontier Province, northern Pakistan]”.

LOCALITIES.— Ajdaha, near Bamiyan (MNHN 1948.171–73); Bamian (MZLU L957/3048); Espisevarz (MZLU L962/3167); 72 km S Herat (CAS 120480); 36 km S Kabul, on rd to Kandahar (CAS 91610–11); Masgid-i-ciovi [= Masjed-e Chubi], Campo 2 (MZUF 24153); Obek (MZLU L957/3049); Orozgon (MZLU L960/3041); Oubek [= Obek] (MZLU L962/3169); Pandjab, Decht Ghoudjour (MZLU L962/3168); 2 km NW Panjoa (CAS 147409–15); Qual’eh Chahrak [= Hezaradjat?] (NMW 15883); Qual èh Nou (MZLU L957/3047); Urgun [Paktita Prov., 2500 m] (ZFMK 8557–8) [see pl. 9, fig. 7 for distribution].

REMARKS.— Nearly two centuries of confusion have surrounded the application and authorship of this name. Bauer et al. (2003) summarized the issues involved in detail. Although sometimes attributed to Fitzinger (1824) or Fitzinger in Lichtenstein (1823) (e.g., Anderson 1999), it is clear that Lichtenstein, although using Fitzinger’s manuscript name (not published until the following year), based his description on material representing a different species than that intended by Fitzinger. Thus, although Fitzinger coined the specific epithet, Lichtenstein alone must be credited as the author of *Scincus pannonicus*.

Boulenger (1889: 100) mentioned one specimen as “*Ablepharus brandtii*” from “on the Helmand”.

***Asymblepharus himalayanus* (Günther, 1864:86, pl. X, fig. H)**

1864 *Eumeces himalayanus* Günther, The Reptiles of British India. The Ray Society, London, United Kingdom. xxvii + 452 pp, 26 pls.

SYNTYPES.— BMNH 1946.8.16.24, from “Kashmir” [two specimens]; BMNH 1946.6.17.62, from “Garhval” [two specimens]; BMNH 1946.8.19.71, from “Simla” [one specimen].

LOCALITIES.— Panjao, Koh-i-Baba [mountain range] (ZMUC R-47131–33); Pashki [Nuristan Prov.] (ZMUC R-47119–20); Puistagoli (ZMUC R-47134–42) [see pl. 9, fig. 8 for distribution].

***Eumeces blythianus* (Anderson, 1871:186)**

1871 *Mabouia blythiana* Anderson, On two saurian genera *Eurylepis* and *Plocederma* Blyth, with a description of a new species of *Mabouia* Fitzinger. Proceedings of the Asiatic Society of Bengal 1871:180–190.

HOLOTYPE.— ZSI 2384, from “Amritzur” [= Amritsar, Punjab State, India].

LOCALITIES.— Seberghan (ZFMK 41118) [see pl. 10, fig. 1 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) did not mention this species from Afghanistan.

***Eumeces schneiderii zarudnyi* Nikolskii, 1900:399, pl. XX, lower left fig.**

1900 *Eumeces zarudnyi* Nikolskii, Reptiles, amphibiens et poissons, recueillis pendant le voyage de Mr. N. A. Zaroudny en 1898 dans la Perse. Annuaire Musée Zoologique de l'Académie Impériale des Sciences de St.-Petersbourg, 4:375–417, pl. XX.

LECTOTYPE.— ZISP 9339, from “Urbs Bazman in Kirmano orient.” [Iran] designated by Taylor (1935).

LOCALITIES.— Feyzabad (see Fig. 20); Pirzada (ZMUC R-47130) [see pl. 10, fig. 2 for distribution].

REMARKS.— Boulenger (1889:101) mentioned specimens “from the Helmand” (one specimen) and “at Shore-kategai in the Badghis” (one specimen), and one of these should correspond to BMNH 1886.9.21.91, but Boulenger did not give specific collection numbers. Leviton and Anderson (1970:191) mentioned *Eumeces schneiderii* from Helmand Basin and northern Afghanistan (north of the Hindu Kush at low elevations) whereas Sindaco and Jeremčenko (2008) did not mention this taxon from Afghanistan.



FIGURE 20 *Eumeces schneiderii* from Feyzabad. Photo by F. Joisten.

***Eurylepis taeniolatus parthianicus* (Szczerbak, 1990:38, figs. 1b–3b)**

1990 *Eumeces taeniolatus parthianicus* Szczerbak, Systematics and geographic variability of *Eumeces taeniolatus* (Sauria, Scincidae) [in Russian]. Vestnik Zoologii, Kiev 1990(3):33–40.

HOLOTYPE.— ZIK Re 18 no. 17660, from “northern slope of central Kopet Dag, Chuli, 25 km west of Ashkhabad, Turkmenistan” [translated from Russian].

LOCALITIES.— Bala Murghab (MMB 28483); Khost [Paktia Prov., 1200 m] (ZMK 2648); Pandjvai, nr. Kandahar (NMW 15882); Somarkhel, right bank of Kabul River (MMB 28484); Tajan River (Leviton and Anderson 1970) [see pl. 10, fig. 3 for distribution].

REMARKS.— Szczerbak (1990) mentioned that he had already described the species in 1989, but the year of publication is, without doubt, 1990.

***Eutropis dissimilis* (Hallowell, 1857:78)**

1857 *Euprepis dissimilis* Hallowell, Notice of some new and rare species of Scincidae in the collection of the Academy of Natural Sciences of Philadelphia. Transactions of the American Philosophical Society, Philadelphia, new series, 11:71–82.

SYNTYPES.— ANSP 9537–38, from “Bengal”.

SYNONYMS.— *Mabuia hodgarti* Hora, 1927 (holotype ZSI 19801; paratypes in ZSP [one specimen] and ZSI 19803–05) from “Rawalpindi, Punjab [in northern Pakistan]”.

LOCALITIES.— Jalalabad (FMNH 161162); 5–10 mi ENE of Nimla, on old Kabul-Jalalabad rd, and about 10 mi SW of Balabagh [34°19–21'N, 70°10–15'E] (CAS 96195) [see pl. 10, fig. 4 for distribution].

***Heremites septemtaeniata* (Reuss, 1834:47, pl. 3, fig. 1a–c)**

1834 *Euprepis septemtaeniatus* Reuss, Zoologische Miscellen. Reptilien. Saurier. Batrachier. Abhandlungen aus dem Gebiete der beschreibenden Naturgeschichte. Museum Senckenbergianum, Frankfurt am Main, Germany 1:27–62, pl. 3.

LECTOTYPE.— SMF 14141, from “Abyssinien, die Umgebung von Massua” [= vicinity of Massawa, Eritrea].

LOCALITIES.— Dar-e-Nur, vic. Shewa [Nangahar Prov., 1200 m] (ZFMK 9064, ZMK 2572) [see pl. 10, fig. 6 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) provided an additional record from northwestern Afghanistan. The nominal genus *Heremites* was resurrected by Karin, et al. (2016) (*q.v.*).

***Ophiomorus tridactylus* (Blyth, 1854:654)**

1854 “1853” *Sphenocephalus tridactylus* Blyth, Notices and descriptions of various reptiles, new or little-known. Part I. Journal of the Asiatic Society of Bengal 22:639–655.

SYNTYPES.— ZSI 2526–29, ZSI 2531–32 from “Afghanistan”.

LOCALITIES.— Baqrabad (ZMUC R-47115–17, 47121–28); Dama rud. (ZMUC R-47118); 10 km NE of Darweshan (CAS 120482–85); 35 km S of Darweshan (CAS 120481); 20 mi E of Girishk [31°43'N, 64°45'E] (CAS 97973); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chahi-Angir (CAS 84669–75); Pirzada (ZMUC R-47129); 5 km (by air) of Takhteh Pol (Rigestan Sand Dunes at W side of Kadeney Rud), ca. 40 km SSE Kandahar (by road to Quetta) (3350) (MVZ 237068–71); 10 km SSE Takhteh Pol (by Quetta Rd.) (3440 ft.) (MVZ 237072–75) [see pl. 10, fig. 5 for distribution].

REMARKS.— Boulenger (1889:101) mentioned one additional specimen from “at an old fort called Nadir Ali, between De-kamran and De-doda on the Helmand”, which most probably refers to BMNH 1886.9.21.92. This is a fossorial lizard of small sandy tracts rather than dune areas in Afghanistan (Clark 1990).

Family Uromastycidae***Saara* Gray, 1845**

According to available studies (e.g., Wilms et al. 2009, Pyron et al. 2013), the eastern species of the genus *Uromastyx* (*U. asmussi*, *U. hardwickii*, *U. loricata*) form a clade that is sister to the remaining species of the genus. Therefore, Wilms et al. (2009) revalided the available genus name *Saara* for these three species. Pyron et al. (2013) and Sindaco et al. (2013) adopted a more conservative concept and recognized *Saara* as synonym of *Uromastyx*, but, because of the distinct morphology, we herein maintain the use of the name *Saara*.

***Saara asmussi* (Strauch, 1863:col. 479)**

1863 *Centrotrachelus Asmussi* Strauch, Charakteristik zweier neuer Eidechsen aus Persien. Bulletin de l'Académie Impériale des Sciences de St. Pétersbourg 6:477–480.

HOLOTYPE.— ZISP 3029 (adult male), from “Seri-Tschah”, in eastern Iran.

LOCALITIES.— Mellem Farak, Saliana (ZMUC R-36228); Seistan, 50km E of Seranj (ZFMK 7925) [see pl. 4, fig. 8 for distribution].

REMARKS.— Sindaco and Jeremčenko (2008) did not mention this species from Afghanistan, but it has subsequently been reported from there by Wilms et al. (2009).

***Saara hardwickii* (Gray, 1827:219)**

1827 *Uromastyx hardwicki* Gray in Hardwicke and Gray, A synopsis of the species of saurian reptiles, collected in India by Major-General Hardwicke. Zoological Journal 3:213–229.

HOLOTYPE.— BMNH 1946.8.14.44 (adult male), from “Plains of Kanouge [= Kanauj District, Uttar Pradesh], Hindustan, India”.

LOCALITIES.— 10 km ESE Jalalabad in the direction to Sarsahi (MMB 28474); 10 km ENE Jalalabad (AFG 12); nr. Jalalabad, on road to Nimla [Nangarhar Prov., 800 m] (ZFMK 8616–17) [see pl. 5, fig. 1 for distribution].

REMARKS.— There are two additional specimens (FMNH 3932–33) from Afghanistan with no further locality data.

Family Varanidae***Varanus bengalensis bengalensis* (Daudin, 1802:67)**

An X (1802) *Tupinambis bengalensis* Daudin, Histoire Naturelle, Générale et Particulière des Reptiles; Ouvrage faisant suite aux Oeuvres de Leclerc de Buffon, et Partie du Cours Complet d'Histoire Naturelle Rédigé par C.S. Sonnini, membre de plusieurs sociétés savantes. Tome troisième. F. Dufart, Paris, France. 452 pp., pls. XXIX–XLV.

LECTOTYPE.— MNHN 2179, from “Bengale” designated by Guibé (1954).

SYNONYMS.— *Varanus punctatus* Merrem, 1820 from “Bengal”. *Monitor gemmatus* Guérin-Méneville, 1829 from “Indes Orientales”. *Monitor heraldicus* Gray in Griffith, 1831 from “Bengal.” *Varanus lunatus* Gray, 1845 from “India”.

LOCALITIES.— Darunta, at the banks of Kabul River, 20 km WNW Jalalabad (MMB 28487); Jalalabad [Nangarhar Prov., 650 m] (ZFMK 8653); 18 km W (by Kabul Rd.) of Jalalabad (2020 ft.) (MVZ 237483); 19.2 km N Jalalabad (FMNH 161208); 20 km ESE Jalalabad (MMB 28485–86); 80 km E Jalalabad (MMB 28488); 30 mi E of Kabul, btwn Kabul and Sarobi [34°33'N, 69°35'E] (CAS 104378); 5–10 mi ENE of Nimla, on old Kabul-Jalalabad rd, and about 10 mi SW of Balabagh [34°19'–21'N, 70°10'–15'E] (CAS 96199) [see pl. 10, fig. 7 for distribution].

REMARKS.— Clark (1990) mentioned that the species was always found near water but also ranged into drier terrain not far from rivers or streams and up to 2600 m a.s.l.

***Varanus griseus caspius* (Eichwald, 1831:190)**

1831 *Psammosaurus caspius* Eichwald, Zoologia Specialis quam Expositis Animalibus tum Vivis tum Fossilibus Potissimum Rossiae in Universum, et Poloniae in Specie, in usum Lectionum Publicarum in Universitate Caesarea Vlnensi Habendarum. Pars Posterior; Specialem Expositionem Spondylzoorum Continentis, Pars Posterior [= vol. 3]. Josphi Zawadski, Vilnae [Vinius], Russia [now Lithuania]. (3) + 404 pp., 2 folding pls. (Decima Classis. Amphibia [pp. 116–197]. Explicatio Tabularum [pp. 395–396]. Index Generum [pp. 397–404]).

HOLOTYPE.— Not located (most probably lost), from “in littori orientali caspii maris [= coast of Caspian Sea], ad sinum balchanensem, in peninsula Dardsha [= Dardzha Peninsula, Turkmenistan]”.

LOCALITIES.— 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84641); between Herat and Islam Qala (Clark 1990, not collected); Murichaq area (J 01–03); Seistan [Faizabad Prov.] (ZMUC R-4228–29) [see pl. 10, fig. 8 for distribution].

REMARKS.— There are additional photographic records (Fig. 21) from Mazar-i-Sharif held in the ZFMK image library. Boulenger (1889: 99) provides a record from “valley of Hari-rud [river]”, this probably refers to the river valley near Herat.

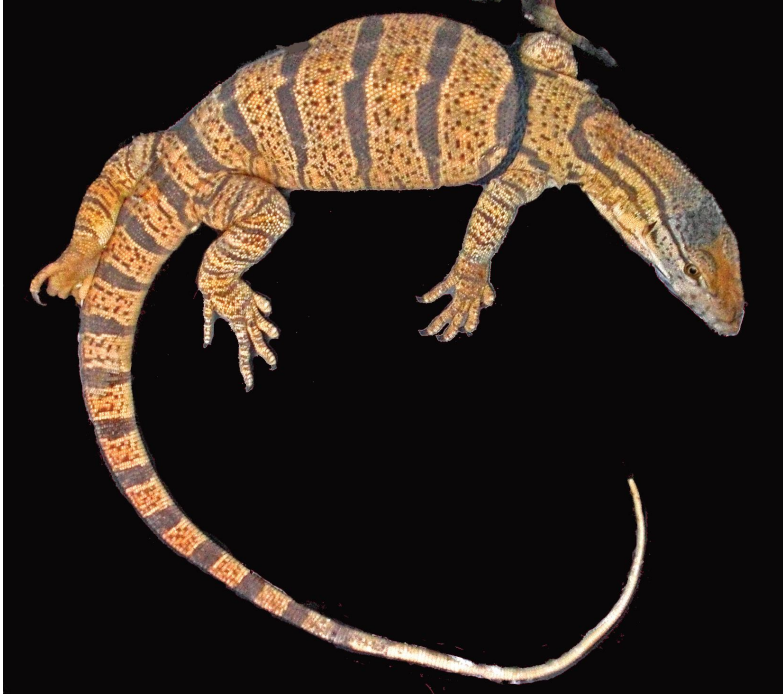


FIGURE 21: *Varamus griseus* from Mazar-i-Sharif. Photo by M. Faulde.

Reptilia: Serpentes

Family Boidae

Eryx elegans (Gray, 1849:107)

1849 *Cusoria elegans* Gray, Catalogue of the Specimens of Snakes in the Collection of the British Museum. Trustees of the British Museum, London. xv + 125 pp.

HOLOTYPE.— BMNH 43.7.21.70, from “Affghanistan [*sic*]”.

SYNONYM.— *Eryx jaculus czarewskii* Nikolskii, 1916 (syntypes ZISP 8462, 8463, 8473, 8489, 8711) from “Koppet-dag [Turkmenistan], Nachduin [Turkmenistan], Gululi-dag [Iran], Kircher [Turkmenistan] and Kopet-dag orient [Turkmenistan]”.

LOCALITIES.— Band-e-Amir [Bamyan Prov., 34°50'N, 67°11'E] (CAS 24990); Dasht-e-Nawar [Ghazni Prov., 3000 m] (ZFMK 8641); Masgidi-ciovi, Campo 2 (MZUF 24108–15); Paghham (FMNH 161178) [see pl. 11, fig. 1 for distribution].

? *Eryx johnii persicus* Nikolskii, 1907:290, fig. 8

1907 *Eryx persicus* Nikolskii, Reptiles et amphibiens recueillis (part.) M. N. A. Zarudny en Perse en 1903–1904 [in Russian and Latin]. Annuaire du Musee Zoologique de l'Academie de Sciences de St. Petersburg 10 [1905]:260–301, pl. I.

HOLOTYPE.— ZISP 10343, from “Aguljaschker” [Agulyashker, Khuzestan Province, Iran].

LOCALITIES.— Mundi, Hissar south of Kandahar (*vide* Murray 1892:79) [see pl. 11, fig. 2 for distribution].

REMARKS.— The status of this taxon is still under debate. It was recognized as a subspecies of *E. johnii* by Stull (1935) and Smith (1943) but later as a synonym of *E. jaculus familiaris* by Stimson (1969) or of *E. jaculus* by McDiarmid et al. (1999). More recently, Sindaco et al. (2013) treated it as a synonym of *E. johnii*, referring to a comment by Rastegar-Pouyani et al. (2008, citing an unpublished manuscript) that “this name [*persicus*] is not available for a western subspecies of *Eryx johnii*, because it applies to a different species of *Eryx*.” Therefore, the exact status of this taxon is not sufficiently clarified and we recognize it here as subspecies of *E. johnii* pending further taxonomic research in this complex. We have not examined any material from Afghanistan and have included it herein based on earlier publications as noted above.

In his review of our manuscript, Dr. Steve C. Anderson (*pers. com.*) offered the following commentary: “The name *Eryx persicus* is not a valid name and should not be used here. The name was associated with *E. johani* by Stull (1935), who never examined the specimen. Stimson (1969) accepted her identification, again without personal verification. At my request, Dr. Natalia Ananjeva of the Zoological Institute, St. Petersburg, examined the type and found it to be in the *E. jaculus* group (*E. j. familiaris*) and not *E. johani*. At present there are no recorded specimens of *E. johani* from Iran. Should the Afghan population prove to be significantly distinguishable from the recognized population of *E. johani*, it requires a new taxon name and description.”

We heartily agree with Dr. Anderson’s summation, which is also suggested in our first paragraph in this Remarks section.

***Eryx tataricus tataricus* (Lichtenstein in Eversmann, 1823:146)**

1823 *Boa tatarica* Lichtenstein, Vorrede (pp. iii–vi) [und] Naturhistorischer Anhang (pp. 112–147) in Eversmann, E. Reise von Orenburg nach Buchara nebst einem Wortverzeichnis aus der Afghanischen Sprache begleitet von einem naturhistorischen Anhang und einer Vorrede. E. H. G. Christiani, Berlin. viii + 150 + 1 + 35 pp.

LECTOTYPE.— ZMB 1461, from “Nähe des Aralsees” [vicinity of Aral Sea] (designated by Bauer et al. [2002]).

LOCALITIES.— Amu-Darya, N of Kunduz (ZFMK 5384–85); 20 km S of Andkhoy (CAS 120491); 2 km N Bala Murhab (J 04, in litt. Brück 1968); vic. of Chacharan (CAS 147408); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84638); Herat town (ZFMK 92801); Karam-Kol (ZFMK 8640); Kunduz (ZFMK 95015); Maimana (FMNH 161205); Nemla, near Jalalabad (MMB 28489); Paghman vic. [34°36'N, 68°56'E] (CAS 115969); 30 km NW of Sheberghan (CAS 120490); Zebak, 102.4 km E Faizabad (FMNH 161123) [see pl. 11, fig. 3 for distribution].

REMARKS.— Boulenger (1889:101) mentioned six specimens of “*Eryx jaculus*” from “Balamorghab” and an additional one from “Robat-i-turk”. Subsequently, two of the specimens (BMNH 1886.9.21.94–95) were reidentified as “*Eryx tataricus*”, whereas the additional four specimens were donated to the ZSI collection where they were mentioned by Sclater (1891:6)

as “*Eryx jaculus*” from “Bala Morghab, Herat” (ZSI 13141–13144). Clark (1990) observed the species as plentiful where it was collected. Sindaco et al. (2013) provide an additional record from Iran (Rud-e Hirmand), close to Afghanistan, so that it is likely that the species also occurs in southwestern parts of Afghanistan.

Family Colubridae

Boiga trigonata melanocephala (Annandale, 1904:209, pl. IX, fig. 4)

1904 *Dipsadomorphus trigonatus* var. *melanocephalus* Annandale, Additions to the collection of Oriental snakes in the Indian Museum. Journal of the Asiatic Society of Bengal 73(2):207–211, pl. IX.

SYNTYPES.— ZSI 14814–15, from “Perso-Baluch frontier”.

LOCALITIES.— 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84637); Ker Dahar (MNHN 0.8724); Mehtarlam (ZFMK 14321) [see pl. 11, fig. 4 for distribution].

REMARKS.— According to the original description, the syntype series consists of three specimens, but only two are present in the ZSI collection (Das et al. 1998).

Eirenis aff. *persicus* (Anderson, 1872:392, fig. 8)

1872 *Cyclophis persicus* Anderson, On some Persian, Himalayan, and other reptiles. Proceedings of the Zoological Society of London 1872(2):371–404, 9 figs.

HOLOTYPE.— ZSI 4828, from “Bushire, Persia” [Bushehr, Iran].

LOCALITIES.— Ken Dahar (MNHN 0.8723); Qual`éh Lakou (MZLU lxxx/6305) [see pl. 11, fig. 5 for distribution].

REMARKS.— An unambiguous identification of these specimens is not possible pending a thorough review of *E. persicus*. Initial data suggest that the material from Afghanistan may be more closely related to specimens from Pakistan than to the nominate subspecies (unpublished data, P. Wagner). The specimen from Paris is catalogued as “*Eirenis walteri*” and is definitely misidentified, as this taxon is only known from Turkmenistan and northeastern Iran. However, at the time of writing, the specimen is on loan and not available to us. The MZLU specimen resembles specimens from Waziristan (Pakistan) for which the names *Contia angusticeps* Boulenger, 1894 and *Contia mcmahoni* Wall, 1911 could be available. Compared with other species of the genus, it might be that the two specimens known from Afghanistan refer to two different species and, therefore, a review of the species complex is needed. Meanwhile we recognize both of the specimens as “*Eirenis* aff. *persicus*”, but we are aware that they are not referable to this species *sensu stricto*. Leviton and Anderson (1970) mention the species because of its presence to the west, south and east of Afghanistan.

Elaphe dione (Pallas, 1773:717)

1773 *Coluber dione* Pallas, Anhang zum zweyten Theil. Descriptiones Animalium. Pages 701–744 In Reise durch verschiedene Provinzen des Rußischen Reiches, Zweter Theil, Zweyres Buch vom Jahr 1771. Kayserliche Akademie der Wissenschaften, St. Petersburg, Russia. pp, 369–744 + (6) pp., pls. I–XIV, Pls. A–Z, 1 map.

TYPES(S).— Not located (most probably lost), from “mountains near Irтин [= Irtysh River]” [translated from German], subsequently specified as “Gratscheffskoi outpost, near Semijarsk, upper Irtysh area, Semipalatinsk district, Kazakhstan” *vide* Helfenberger (2001).

LOCALITIES.— Kunduz, 6 ½ mi SE of, village of Bolla Quchi [Kundus Prov.] (USNM 166774–75) [see pl. 11, fig. 6 for distribution].

REMARKS.— Dotsenko (2003: 31) mentioned an additional specimen (ZIK 1796/4433) from “Wüste Registan [= Registan desert], Umgebung von Kandahar [= vicinity of Kandahar], Prov. Kandahar, Afghanistan”.

***Hemorrhois ravergieri* (Ménétriés, 1832:69)**

1832 *Coluber Ravergieri* Ménétriés, E., Catalogue Raisonné des Objets de Zoologie Recueillis dans un Voyage au Caucase et jusqu’aux Frontières Actuelles de la Perse. Imprimerie de l’Académie Impériale des Sciences, St. Pétersbourg, Russia. (4) + 271 + XXXIII + V pp.

SYNTYPE.— ZISP 1750, from “Georgien” *fide* Strauch (1873). According to the original description from “Géorgie [and], près de Bakou” [Georgia and near Baku (Azerbaijan)]; the syntype from “près de Bakou” is unlocated. In the original description, Ménétriés (1832:70) mentioned his new species from Georgia, but the only detailed description he gave is for the single specimen from “près de Bakou,” collected by Ménétriés himself. The only specimen in the ZISP from the Ménétriés collection that was collected by Ravergier is from Georgia (see Strauch 1873:274; Nikolskii 1905:239; Nikolskii 1916:103). Strauch (1873) gave the pholidosis for ZISP 1750 as “198 [ventralia] + 2 [= divided anal scale] + 81 [subcaudalia] whereas the specimen from Baku has “195 [ventralia] + 75 [subcaudalia]” *fide* Ménétriés (1832).



FIGURE 22: *Hemorrhois ravergieri* from Feyzabad. Photo by F. Joisten.

LOCALITIES.— Feyzabad (see Fig. 22); N edge of village of Kara Bagh (CAS 90798); 30 km S of Kandahar (ZFMK 5386); Kotgai, nr. Safed-Koh [Paktia Prov., 2350 m] (ZFMK 8560); Kunduz (ZFMK 95016–19); Paghman (CAS 151230, FMNH 161177); Pashki [Nuristan Prov.] (60106–08); Stieve [Nuristan Prov.] (ZMUC R-60104); Wama [Nuristan Prov.] (ZMUC R-60105) [Fig. 22; see pl. 11, fig. 7 for distribution].

REMARKS.— Boulenger (1889:102) mentioned three specimens from “Tirphul, Gulran, Chinkilok,” which most probably refer to BMNH 1886.9.21.97–99, but it is not possible to assign these specimens to their corresponding specific localities. Smith (1940:384) mentioned an additional specimen from “Bamian 8000 ft.,” that could refer to BMNH 1938.2.4.15. Schätti and Agasian (1985) mapped several localities in Afghanistan (without referencing specimens) and mentioned that ZFMK 5386 was collected from the claw of a snake eagle.

***Lytorhynchus maynardi* Alcock and Finn, 1897:562, pl. XIV**

1897 “1896” *Lytorhynchus maynardi* Alcock and Finn, An account of the Reptilia collected by Dr. F.P. Maynard, Captain A.H. McMahon, C.I.E., and the members of the Afghan-Baluch Boundary Commission of 1896. *Journal of the Asiatic Society of Bengal* 65:550–566, pls. XI–XV.

SYNTYPES.— BMNH 1946.1.14.79, from “near Robat I, 4500 ft [= south of Koh Malik-dokhand, by the River Malah Do Kand, Garmser District, Helmand Province, S Afghanistan, ca. 1350 m elevation].” ZSI 14223–25 from the same locality.

LOCALITIES.—10 km NE of Darweshan (CAS 120493); 56 km S and 10 km E of Darweshan (CAS 120494) [see pl. 11, fig. 8 for distribution].

REMARKS.—Clark (1990) collected specimens after dark on sand dunes.

***Lytorhynchus ridgewayi* Boulenger, 1887:413**

1887 *Lytorhynchus ridgewayi* Boulenger, G.A., Description of a new snake from Afghanistan. *Annals and Magazine of Natural History*, ser. 5, 20:413–414.

SYNTYPES.— BMNH 1946.1.14.77–78, from “Chin-Kilak, Afghanistan” [Chinkilok, Herat Province].

SYNONYM.— *Lytorhynchus gabrielis* Werner, 1938 from “Unter Ziarat, Belutschistan [nicht weit von der afghanischen Grenze entfert]” [= Ziarat, Baluchistan (close to the Afghan border)] (holotype NMW 23440).

LOCALITIES.— 35 km S of Darweshan (CAS 120495); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84639) [see pl. 12, fig. 1 for distribution].

REMARKS.— The specimen collected by Clark (1990; CAS 120495) was found after sunset on gravel strewn alluvium. Sindaco et al. (2013) provide a record from Pakistan (Saindak) close to the Afghan border so that it is possible that the species also occurs in extreme southern parts of Afghanistan.

***Natrix tessellata* (Laurenti, 1768:87)**

1768 *Coronella tessellata* Laurenti, Specimen Medicum, Exhibens Synopsis Reptilium Emendatum cum Experimentis Circa Venena et Antidota Reptilium Austriacorum. Joan. Thomae. nob. de Trattnern, Vienna, Austria. (8) + 214 + (3) pp., 5 pls. [thesis version]; (2) + 214 + (1) pp., 5 pls. [published version].

TYPE(S).— In the Turriano collection, (not located, from “in Japidia, vulgo Cars [= Kras, Slovenia/Italy]”).

LOCALITIES.— Ag Chah [Mazar-i-Sharif Prov.] (SNM 58); Feyzabad (Fig. 23); Herat town (ZFMK 92803); Kunduz (95022–25); Maimana (FMNH 161204); Masgidi-ciovi, Campo 2 (MZUF 24053, 24057–63); Mazar-i-Sharif (FMNH 161112); Paghman [34°36'N, 68°56'E] (CAS 115972, FMNH 161180); Panjao, Koh-i-Baba (ZMUC R-60101); Sar-i-Chiasma, nr. Kabul (ZMUC R-60100) [see pl. 12, fig. 2 for distribution].

REMARKS.— There are three additional specimens (BMNH 1938.2.4.12–14) from “Afghanistan”, that correspond with those specimens mentioned by Smith (1940:384) from “Dana Ghon 2400 ft.”

***Oligodon arnensis* (Shaw, 1802:526)**

1802 *Coluber arnensis* Shaw, General Zoology, or Systematic Natural History. Vol.3, part 2. G. Kearsley, Thomas Davison, London, United Kingdom. vi + (1) + 313–615 pp., pls. 87–140.

HOLOTYPE.— Specimen illustrated in Russell (1796, plate 38), from “the country of Arnee in the



FIGURE 23: *Natrix tessellata* from Feyzabad. Photo by F. Joisten.

East Indies” [= Arni, Tamil Nadu, India]. The specimen was incorrectly listed as the lectotype by Wallach et al. (2014) (see Bauer 2015).

LOCALITIES.— 3 km SE Jalalabad (MMB 28497) [see pl. 12, fig. 3 for distribution].

***Oligodon taeniolatus taeniolatus* (Jerdon, 1853:528)**

1854 [1853] *Coronella taeniolata* Jerdon, Catalogue of the reptiles inhabiting the Peninsula of India. Part 2. Journal of the Asiatic Society of Bengal xxii:522–534.

TYPES(S).— Not located (most probably lost), from “Madras” (=Chennai, Tamil Nadu State), India.

LOCALITIES.— Kars [Kandahar Prov.] (USNM 194971) [see pl. 12, fig. 4 for distribution].

REMARKS.— Brück (1968) provided a record from “dem Gebiete um Djelalabad” [= vicinity of Jalalabad] that is shown by Sindaco et al. (2013) as a second record from Afghanistan, but not confirmed here because the locality is too imprecise.

***Platyceps karelini karelini* (Brandt, 1838:col. 243)**

1838 *Coluber* (*Tyria*) *karelini* Brandt, Note sur quatre nouvelles espèces de serpents de la côte occidentale de la mer Caspienne et la Perse septentrionale, découvertes par M. Kareline. Bulletin Scientifique publié par l’Académie Impériale des Sciences de St. Pétersbourg 3:cols. 241–244.

SYNTYPES.— ZISP 1695–1700 from “sur la côte orientale de la mer Caspienne. [= coast of the Caspian Sea]”.

LOCALITIES.— Ag Chah [Mazar-i-Sharif Prov.] (SNM 54); Baqrabad (ZMUC R-6097); Bala Murghab, Herat province (Brück 1968); Chinkilok nr. Herat (ZSI 13107); btw. “Cia-i-Baloch [= Robot-i-Shah Baloch] and Cia-i-Lagun, camp 1” (MZUF 24027–29); mountains near Cia-i-Dudi [= Kuh-e Chah Dudi] (MZUF 24026); 35 mi downstream from Girishk, Dasht-i-Margo Area, Kandahar (MZLU L958/3224); Ker Dahar (MNHN 0.8722, MNHN 1999.8160); Kilki (BMNH 1886.9.21.103); 45 km W of Herat (CAS 120714); Herat to Islam Qala [34°22’N, 62°10’E to 34°47’N, 61°05’E] (CAS 103785); Mazar-i Sharif (ZFMK 86743, 36°43’N, 67°07’E); 10 km W of Tashkurgan (CAS 120540); Tirphul (BMNH 1886.9.21.102) [see pl. 12, fig. 5 for distribution].

REMARKS.— Blanford (1876:415) mentioned one specimen (BMNH 1873.1.7.10) as “*Zamenis Ladacensis*” from “Kila-i-Fath, Sístán [= Qala-i Fateh, Qal’eh-ye Fath, Afghanistan, ca. 30°34’N, 61°50’E]”. However, the specimen was later identified as hybrid between *Platyceps k. karelini* and *Platyceps r. rhodorachis* by Schätti et al. (2014). Sclater (1891:28) mentioned one specimen (ZSI 13107) as “*Zamenis karelini*” from “Chinkilok nr. Herat [ca. 34°31’N, 61°52’E]” collected by the “Afghan Boundary Commission (Aitchison 1889). Boulenger (1889:102) mentioned four specimens from “Helmand, Tirphul, Chinkilok, Kilki” which have been identified by Schätti et al (2012) as: BMNH 1886.9.21.101 from “Helmand [ca. 30°17’N, 62°03’E]” [= a hybrid between *Platyceps k. karelini* and *Platyceps* sp.]; ZSI 13107 from “Chinkilok [ca. 34°31’N, 61°52’E]” and donated to the ZSI from the BMNH [= ? *Platyceps k. karelini*]; BMNH 1886.9.21.102 from “Tirphul [ca. 34°36’N, 61°16’E]” [= *Platyceps k. karelini*]; BMNH 1886.9.21.103 from “Kilki [ca. 34°00’N, 61°25’E]” [= *Platyceps k. karelini*]. Moreover, Boulenger (1889:102) mentioned one specimen (BMNH 1886.9.21.104) as “*Zamenis rhodorachis*” from “second Gulran encampment, Badghis”, that was identified as a hybrid between *P. k. karelini* and *P. r. rhodorachis* by Schätti et al. (2014). The same authors also recognized ZFMK 86743 from Mazar-i-Sharif as hybrid of the same two species. Clark (1990) mentioned this species as very common at Darweshan and Kandahar, but sporadic elsewhere. It occurs on non-sandy to sandy soils with both firm and loose sands.

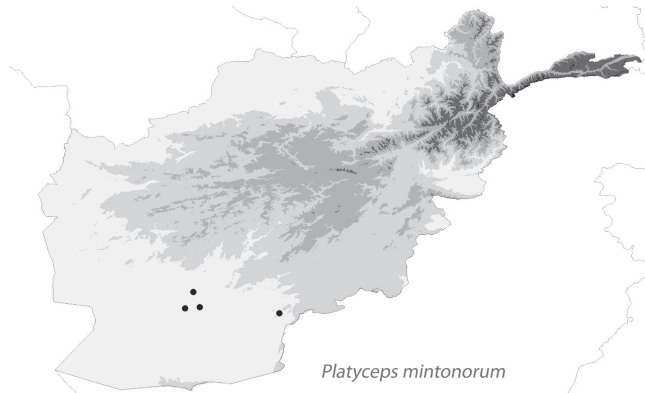


FIGURE 24: Distribution of *Platyceps mintonorum* in Afghanistan.

***Platyceps mintonorum* (Mertens, 1969:56)**

1969 *Coluber karelini mintonorum* Mertens, Die Amphibien und Reptilien West-Pakistans. Stuttgarter Beiträge zur Naturgeschichte aus dem Staatlichen Museum für Naturkunde Stuttgart 197:1–96.

HOLOTYPE.— SMF 62942 from “Zangi-Nawar, 27 km südwestlich von Nushki [= 27km SW of Nushki], Distr. Chagai, West-Pakistan”.

LOCALITIES.— Chah-i-Angir (CAS 84630–36), 10 km N of Darweshan (CAS 120541, CAS 120543), 10–20 km NE of Darweshan (CAS 120715), 40 km SE of Kandahar (CAS 120716–17).

REMARKS.— See Fig. 24 for distribution.

***Platyceps rhodorachis* (Jan in de Filippi, 1865:356)**

1865 *Zamenis rhodorachis* Jan, Prime line d’una fauna della Persia occidentale. Rettili. Pages 352–357 In De Filippi, F., Note di un Viaggio in Persia nel 1862. G. Daelli and C. Editori, Milan, Italy.

LECTOTYPE.— MSNG 30312 from “Persia, Schiraz”. For further information concerning the type material we refer to Schätti et al. (2014).

LOCALITIES.— Ag Chah (SNM 55–57); Bisut area [= Behsud] (MMB 28501–02); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84634–36); Dashti Nawar [Plain] (ZFMK 41340); Hadda (MZLU L958/3225–26); Herat town (ZFMK 92802, USNM 166773); 30 km SW of Jalalabad (CAS 120718); 40 km W of Jalalabad (CAS 120492); 10 km west of Jawand [“Kala-i-Chambar”] (SMF 67907); 15 km southwest of Kabul (CAS 92323); Kabul (ZFMK 8559, 8651, 8678; MMGU 2729a–b, NMW 34992); Kabul Carteseh (CAS 147425); Kabul Sharinau (CAS 147426); 15 km SW of Kabul on rd to Kandahar (CAS 92323); east of Kandahar (CAS 115970); Kandahar (CAS 115970, FMNH 161075, FMNH 171788, MZLU L960/3035–36, ZFMK 8645); Kunduz (ZFMK 84787, 95020; ZSM 22.1954.1–2); Lashkargah, Dashtimargo (CAS 147427); Masgid-i-ciovi [= Chobi] (MZUF 23939–42); Mazar-i-Sharif (ZFMK 86744); 5–10 mi ENE of Nimla and about 10 mi SW Balabagh, on old Kabul-Jalalabad rd [34°19′–21′N, 70°10′–15′E] (CAS 96250); Paghman vic. [34°36′N, 68°56′E] (CAS 115971 formerly FMNH 161185); Pesh Valley [Nuristan Prov.] (ZFMK 8643–44); Qualat (MZLU L958/3227); Such (BMNH 1968.1303) [see pl. 12, fig. 6 for distribution].

REMARKS.— Jan (1857) first mentioned the name *rhodorachis* but its use was as a *nomen nudum* as no characters were provided to separate it from other known species. However, just a few years later he gave a valid description (Jan in de Filippi 1865). The taxonomic status of this species is complex and still needs to be resolved. Král (1969) recognized two subspecies, *P. r. rhodorachis* [sic] (SNM 57) and *P. r. ladacensis* (SNM 55–56) (both from Ag Chah) in Afghanistan. But *P. r. ladacensis* (Anderson, 1871), described from Ladakh a few years after the description of the nominate form, was treated as a synonym of *P. rhodorachis* [sic] by Boulenger (1893). Later it was again recognized as subspecies (e.g., Terent’ev and Chernov 1949, Szczerbak 2003). According to Szczerbak (2003), the nominate subspecies occupies only southern Turkmenistan, whereas *P. r. ladacensis* occurs throughout rest of the distribution range. In as much as both taxa were recognized in southern Turkmenistan, Shammakov (1989) suggested they be accorded full species status. Recently, referring only to the count of ventral scales given in the first description, Perry (2012) also recognized *P. ladacensis* as a full species, ranging from Israel to India. Given the obvious uncertainties in recognizing species-level taxa within this species complex, we believe that a full, integrative revision is definitely needed. A first step was taken in the morphological review by Schätti et al. (2014) who recognized several potential hybrids between *P. rhodorachis* [sic] and *P. k. karelini* (see herein the species account of the latter species).

ZFMK 8644 has bats (*Nyctalus leisleri*) in its stomach.

***Ptyas mucosa nigriceps* Terent’ev and Chernov, 1949:246**

1949 *Ptyas mucosus nigriceps* Terent’ev and Chernov, *Opredelitel Presmykatushchikhsya i Zemnovodnykh*. [Encyclopedia of reptiles and amphibians, in Russian]. Sovetskaya Nauka, Moscow, Union of Soviet Socialist Republics [now Russia]. 340 pp.

SYNTYPE.— ZISP 15698, from “Takhta-Bazar st., left bank of Murgab” [= Turkmenistan, Mary Province; translated from Russian].

LOCALITIES.— Baraki Barak, 10 km W of [Logar Prov.] (USNM 194606); Darulman, vic. of Kabul [Kabul prov., 1800 m] (ZFMK 8639); btw. Gornails and Bokan, NE of Bala Morhab (MNHN 1948.176); Herat area (FMNH 161113); Kabul (CAS 120544); 40 km SW of Kabul on rd to Kandahar, in Kabul River (CAS 92324); Kamdesh (FMNH 161135); Kamu (13325–26);

Kandahar [31°36'N, 65°47'E] (CAS 115973, FMNH 161272–73); Maimana [35°54'N, 64°43'E] (CAS 115974); Obek (ZMUC R-60102); ca. 4 km above Paghman (7950 ft.) (MVZ 237484) [see pl. 12, fig. 7 for distribution].

REMARKS.— The status of this subspecies is questionable. Terent'ev and Chernov (1949) indicated that they were describing a new subspecies but the diagnosis, “Adult specimens from Turkmenistan are almost black, shiny, with yolk yellow abdomen, and young are light gray, with some scales being partly or entirely white, and with yellow abdomen”, seems somewhat abbreviated. Moreover, no name-bearing type is specifically mentioned, and, therefore, all specimens examined by the authors from Turkmenistan have to be treated as syntypes. However, some subsequent authors have accepted the taxon (e.g., Szczerbak 2003 as *P. m. nigricens* Chernov, 1949 [*sic*]).

***Spalerosophis diadema schirazianus* (Jan in de Filippi, 1865:356)**

1865 *P[eriops] parallellus* Geoff. var *schiraziana* Jan, Prime line d'una fauna della Persia occidentale. Rettili. Pages 352–357 in De Filippi, F. Note di un Viaggio in Persia nel 1862. G. Daelli & C. Editori, Milan, Italy.

SYNTYPES.— Originally three specimens housed in MSNM based on Jan (1863) from “Schiraz, Persia” [Shiraz, Fars Province, Iran], now lost (*fide* Schätti et al. [2010]).

LOCALITIES.— Anahoy Desert (USNM 194977); Jalalabad (MMB 28500); E Jalalabad (MMB 28499); Kabul 14457); (ZFMK Maimana (FMNH 161206); Nimla [Nangahar Prov., 1000 m] (ZFMK 8642); Paghman (FMNH 161057); Tirphul [= Tir Pul] (Boulenger 1889) [see pl. 12, fig. 8 for distribution].

REMARKS.— Other spellings of the specific epithet, e.g., *schirazana/-us*, *schirasiana/-us* are incorrect subsequent spellings. Lantz (1918) additionally referred to a record from the “Tajan River area”, an imprecise locality not mapped here. Boulenger (1889:201; 1893:412) mentioned another specimen from “Nushki to Helmand” in the BMNH collection that most probably refers to the “eastern *diadema*” according to Schätti et al. (2010, see below). The taxonomic status of this taxon is under debate. Baig and Masroor (2008) placed it as a synonym of the nominate form, whereas Schätti et al. (2009) recognized it as subspecies. According to Schätti et al. (2010), the records from eastern Afghanistan (border area with Pakistan) do not represent the taxon *Spalerosophis diadema schirazianus*, but a form named by Schätti et al. (2010) “eastern *diadema* (modus operandi)”. This includes both specimens listed above from Jalalabad. The specimen mentioned by Günther (1864:253) and Boulenger (1893:413) from “Afghanistan” collected by “Dr. Griffith” was tentatively included in this form as well. This results in the following assemblage of taxa: (1) *S. d. schirazianus* Anahony Desert; Kabul, Maimana; Paghman; and Tirphul, and (2) “eastern *diadema*” (*fide* Schätti et al. 2010), which is represented by the specimens from Jalalabad, Nimla, and Nushki to Helmand.

***Teleoscopus rhinopoma* (Blanford, 1874:34)**

1874 *Dipsas rhinopoma* Blanford, Descriptions of new Reptilia and Amphibia from Persia and Baluchistán. Annals and Magazine of Natural History, ser. 4, 14:31–35.

SYNTYPES.— BMNH 1946.1.5.10 and ZSI 3500, from “in Carmania” [Kerman, Iran], according to Blanford (1876) collected at Karmán at 5000 ft elevation. Blanford, in his original description (Blanford 1874), gave morphological characters, but later (Blanford 1876:421) he explicitly mentions two specimens with identical pholidosis and locality as given in the original description. Therefore, the type series includes two syntypes rather than the ZSI specimen, which has

been cited as the holotype by several authors (e.g., Sclater 1891:48; Das et al. 1998:148).

SYNONYMS.— *Dipsadomorphus Jollyi* Wall, 1914 from “Kacha Thana, Baluchistan” (holotype not located).

LOCALITIES.— Band-e-Kadjaki, Kadjaku [Kandahar Prov., 1050 m] (ZMK 2736) [see pl. 13, fig. 1 for distribution].

***Xenochrophis piscator* (Schneider, 1799:247)**

1799 *Hydrus Piscator* Schneider, *Historiae Amphibiorum naturalis et literariae. Fasciculus primus, continens Ranas, Calamitas, Bufones, Salamandras et Hydros in genera et species descriptos notisque suis distinctos*, vol. 1. Friederici Frommanni, Jena, XIII + (1) + 264 + (2) pp., pls. 1–2.

HOLOTYPE.— Specimen illustrated in Russell [1796], pl. 33 from “Indiae orientalis.” Vogel and David (2012) identified this specimen as a dried skin, BMNH 1904.7.27.31, presumably from Patrick Russell’s collection. They also restricted the type locality to “the coastal areas of northern Andhra Pradesh State, eastern India” based on Russell’s chief area of residence and activity during his stay in India. However, according to Bauer (2015), BMNH 1904.7.27.31 was obtained by the museum about 100 years after Russell’s death, so the status of the specimen as holotype is still questionable.

LOCALITIES.— Darunta, 20 km WNW Jalalabad (MMB 28506–07); Jalalabad [Nangahar Prov., 650 m] (MMB 28504–05, ZFMK 8652); 40 km SW of Jalalabad (CAS 120542) [see pl. 13, fig. 2 for distribution].

REMARKS.— The specimen collected by Clark (1990; CAS 120542) was found amongst rocks along the edge of a stream.

Family Elapidae

***Bungarus sindanus* Boulenger, 1897:73, pl. 1**

1897 *Bungarus sindanus* Boulenger, A new krait from Sind (*Bungarus sindanus*). *Journal of the Bombay Natural History Society* 11(1):73–74, 1 pl.

SYNTYPES.— BMNH 1946.1.18.54–55 from “Sukkur, Sind” and BMNH 946.1.19.16 from “Umarnot, Sind” [Sukkur and Umerkot, Sindh Prov., Pakistan].

LOCALITIES.— 20 km E Jalalabad (MMB 28492); Khost [Paktia Prov., 1200 m] (NMW 35010, ZFMK 8672) [see pl. 13, fig. 3 for distribution].

REMARKS.— Král (1969) recorded *B. caeruleus* from the Kabul River Valley of eastern Afghanistan, a record also mentioned by subsequent authors (e.g., Khan 1985), but this record is likely referable to *B. sindanus* (the questionably valid subspecies *B. sindanus razai* Khan, 1985, is now usually recognized as synonym, but it is still regarded as a distinct taxon by some authors). Kuch (2003) later published the first vouchered record of *B. sindanus* from Khost, based on a juvenile specimen (NMW 35010).

***Naja oxiana* (Eichwald, 1831:171)**

1831 *Tomyris oxiana* Eichwald, *Zoologia Specialis quam Expositis Animalibus tum Vivis tum Fossilibus Potissimum Rossiae in Universum, et Poloniae in Specie, in usum Lectionum Publicarum in Universitate Caesarea Vilnensi Habendarum. Pars Posterior; Specialem Expositionem Spondylzoorum Continentis*, vol. Pars Posterior [= Vol. 3]. Josphi Zawadzki, Vilnae [Vilnius], Russia [now Lithuania]. (3) + 404 pp., 2 folding pls. (Decima Classis. Amphibia [pp. 116–197]. Explicatio Tabularum [pp. 395–396]. Index Generum [pp. 397–404]).

HOLOTYPE.— ZISP 8728, from “Oxus” [= Amu Darya River, Central Asia].

LOCALITIES.— Ashab Kahf (MZLU L957/3035); Jalalabad (FMNH 161138); vic. of Jalalabad (Brück 1968); Kabul, on road to Paghman [Kabul Prov., 2000 m] (ZFMK 8561); Khurd-Kabul [Kabul prov., 1900 m] (ZFMK 8646); Kunduz (ZFMK 95021); Logar Valley, 15 km S of Kabul [Kabul Prov., 2000 m] (ZMK 2742); Omegnen, nr. Kabul (ZMUC R-6523–24); Selsala-Koh-i-Bend-i-Kermak [Herat Prov.] (MMB 28498) [see pl. 13, fig. 4 for distribution].

REMARKS.— Boulenger (1889:103) mentioned two specimens from “Chinkilok” and one from “Kara-bagh [= Qarabagh]”, which probably refer to BMNH 1886.9.21.118–120.

Family Lamprophiidae

Psammophis leithii Günther, 1869:505

1869 *Psammophis leithii* Günther, Report on two collections of Indian reptiles. Proceedings of the Zoological Society of London 1869:500–507.

HOLOTYPE.— BMNH 1946.1.2.82 (formerly 1869.8.28.124), from “Sind.”

LOCALITIES.— Afghanistan [without detailed locality] (ZFMK 8650); 8 km ESE Jalalabad, direction to Sarsahi (MMB 28496) [see pl. 13, fig. 5 for distribution].

REMARKS.— Sclater (1891:50) mentioned one specimen (ZSI 11421) as “*Psammophis leithii*” from “Chaman, S. Afghanistan”, which was donated by “J.A. Murray”. While it was not possible to locate this place in Afghanistan, it seems most probable that it refers to Chaman, a locality just across the Afghan-Pakistan border in present-day Pakistan.

Psammophis lineolatus (Brandt, 1837:col. 243)

1837 *Coluber (Taphrometopon) lineolatus* Brandt, Note sur quatre nouvelles espèces de serpents de la côte occidentale de la mer Caspienne et la Perse septentrionale, découvertes par M. Kareline. Bulletin Scientifique publié par l’Académie Impériale des Sciences de St. Pétersbourg 3:cols. 241–244.

HOLOTYPE.— ZISP 2042, from “sur la côte orientale de la mer Caspienne [= coast of the Caspian sea], dans la Turcomanie et dans le nord de la Perse [= northern Iran], notamment dans les environs d’Astrabad [= Gorgan, Golestan province, Iran].”

LOCALITIES.— Ag Chah [Mazar-i-Sharif Prov.] (SNM 59–60); 45 km S Andkhoy (CAS 120496); Murichaq, N Bala Murghab [Herat Prov.] (MMB 28493); 8 km ESE Jalalabad, direction to Sarsahi (MM 28494); near Kunduz (MMB 28495); 65–75 km W of Mazar-i-Sharif (CAS 120539); vic. Paghman (FMNH 161184); 30 km SE Shindand (CAS 120497) [see pl. 13, fig. 6 for distribution].

REMARKS.— Sclater (1891:49 f.) mentioned one specimen (ZSI 13135) as “*Taphrometopon lineolatum*” from “Zindijan near Tirphul” and two others (ZSI 13136) from “near Tirphul”, collected by the “Afghan Boundary Commission (Aitchison 1889). These are, most probably, the specimens that are later mentioned by Boulenger (1889:103) and donated to the ZSI collection. Moreover, Boulenger (1889) refers to four specimens from “Tirphul” that are probably represented by BMNH 1886.9.21.115–117 and BMNH 1886.9.21.14 [*sic*; the correct number is 114]. Moreover, Boulenger (1896:152) also mentioned one specimen from “Helmand”. Clark (1990) collected specimens from amongst vegetation on firm clay or baked earth terrain.

Psammophis schokari (Forskål, 1775:14)

1775 *Coluber schokari* Forskål, Descriptiones Animalium, Avium, Amphibiorum, Piscium, Insectorum, Vermium; quae in Itinere Orientali Observavit Petrus Forskål. Mölleri, Hauniae [Copenhagen, Denmark]. xxxiv + 164 pp.

TYPE(S).— Not located, from “Yemen”.

LOCALITIES.— Baqrabad (ZMUC R-6349–51); 20 km N of Farah (MZUF 24174); 18 km E of Girishk (CAS 120498–99, CAS 120709); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84629); 45 km W Jalalabad (CAS 120500, CAS 120538); 40 km SE of Kandahar (CAS 120713); 71 km SSW Kabul (by Kandahar Rd.) (6230 ft.) (MVZ 237082); Ker Dahar (MNHN 0.8721); 32 km NW Lashkargah (CAS 120710–12, CAS 120987); Seistan [Faizabad Prov.] (ZMUC R-6352); Shawalikot, Wayan Village [Kandahar Prov.] (USNM 194980); SE of Zehak (along the Iran-Afghanistan border, Agricultural College) (1450 ft.) (MVZ 243503) [see pl. 13, fig. 7 for distribution].

REMARKS.— Boulenger (1889:103) mentioned specimens as “*Psammophis leithii*” from “Helmand (2 spec.)” and “Hamun to Khusan [= Kohsan] (3 spec.)”. Most probably the two specimens from Helmand (?BMNH 1886.9.21.111–112) were subsequently re-identified as *Psammophis schokari*. However, BMNH 1882.3.20.1 is also catalogued as *P. schokari* and could represent one of the Helmand specimens (see Boulenger 1896:158). Moreover, Boulenger (1896:152) mentioned one specimen of *P. lineolatus* from “Helmand” collected by the “Afghan Boundary Comm.”, which could also refer to one of these specimens. Clark (1990) documented this species as very common and usually found near bushes and on man-made earth banks close to rodent holes. A record plotted by Sindaco et al. (2013) from northern Afghanistan is based on incorrect coordinates and should be considered invalid (Sindaco, pers. comm. Nov. 2013).

Family Leptotyphlopidae

Myriopholis blanfordii (Boulenger, 1890:243, fig. 72)

1890 *Glaucania blanfordii* Boulenger, The Fauna of British India, Including Ceylon and Burma. Reptilia and Batrachia. Taylor and Francis, London, United Kingdom, xviii + 541 pp.

SYNTYPES.— BMNH 1946.1.16.85–89 (formerly BMNH 1869.8.28.58–61), from “Sind” [Sindh, Pakistan].

LOCALITIES.— Jalalabad to Nimla (CAS 120486–87); Laghman [Laghman Prov., 1000 m] (ZFMK 8673–77); Nimla (CAS 120488–89, CAS 121054–55) [see pl. 13, fig. 8 for distribution].

REMARKS.— The specimens collected at Nimla were found under stones and rocks in dampish conditions (Clark 1990).

Family Typhlopidae

Indotyphlops braminus (Daudin, 1803:279)

1803 *Eryx braminus* Daudin, Histoire Naturelle, Générale et Particulière des Reptiles; Ouvrage faisant suite aux Oeuvres de Leclerc de Buffon, et Partie du Cours Complet d’Histoire Naturelle Rédigé par C.S. Sonnini, membre de plusieurs sociétés savantes. Tome septième. F. Dufart, Paris. 436 pp., pls. LXXXI–XCII.

HOLOTYPE.— Type specimen lost but imaged in Russell (1796, pl. 43) from “Vizagapatam [Visakhapatnam, Andhra Pradesh, India].”

LOCALITIES.— No specific locality known.

REMARKS.— Sclater (1891:1) mentioned one specimen (ZSI 12896) as “*Typhlops braminus*” from “Afghanistan,” collected by the “Boundary Commission.”

***Xerotyphlops vermicularis* (Merrem, 1820:158)**

1820 *Typhlops vermicularis* Merrem, Versuch eines Systems der Amphibien — Tentamen Systematis Amphibiorum. Johann Christian Krieger, Marburg, Germany. XV+191 [German], XV +191 [Latin] pp., 1 pl.

TYPE(S).— Not located, from “Griechische Inseln, Asien/ in Archipelagi, Asia” [Greek islands and Asia], incorrectly restricted to “Griechische Inseln [= Greek islands]” by Mertens and Müller (1928).

SYNONYMS.— *Typhlops persicus* Blanford, 1874 from “in Persia meridionali”, is based on two syntypes (ZSI 6899 and BMNH 1946.1.11.87 [formerly BMNH 1874.11.25.17]). Blanford (1876) specified the type locality as “Hills, north-east of Darján, between Karmán and Shiráz” [Iran]. Sclater (1891) and Das et al. (1998) recognized ZSI 6899 as the holotype, but Blanford (1876) explicitly referred to two type specimens. Therefore, the taxon is based on two syntypes rather than on one holotype (see e.g., McDiarmid et al. 1999:124).

LOCALITIES.— Chinkilok, N of Herat (Boulenger 1889:101); Kishm (Keshem), near Dara-i-kur [Badakhshan Prov.] (USNM 163539); Kunduz (ZFMK 94241); Tala (MZLU L947/3197) [see pl. 14, fig. 1 for distribution].

REMARKS.— Boulenger (1889:101) mentioned one specimen as “*Typhlops persicus*” from “camp at Chinkilok, north of Herat [...] if not there, certainly between that and the Sang-khotal pass.”, that probably refers to BMNH 1886.9.21.93. Sindaco et al. (2013) provided additional records from northern Afghanistan.

Family Viperidae***Echis carinatus sochureki* (Stemmler, 1969:118, figs. 1–4)**

1969 *Echis carinatus sochureki* Stemmler, Die Sandrasselotter aus Pakistan: *Echis carinatus sochureki* subsp. nov. Aquaterra 6:118–124.

HOLOTYPE.— NHMB 17468 from “West-Pakistan, Ban Kushdil Khan bei Pishin, Rand eines Staueses [bank of a barrier lake at Ban Kushdil near Pishin in western Pakistan].”

LOCALITIES.— Balk (ZMUC R-6840); Baqrabad (ZMUC R-6837); 35 mi downstream from Girishk, Dasht-i-Margo Area, Chah-i-Angir (CAS 84627–28); 20 km SE Islam Qala (CAS 120501); outskirts of Jalalabad (MMB 28490–91); Kandahar [Kandahar Prov.] (FMNH 161072–73, ZFMK 8647); Kaykay [Helmand Prov.] (ZMUC R-6839); 32 km NW of Lashkargah (CAS 120719); Seistan [Faizabad Prov.] (ZMUC R-6838); 10 km W of Tashkurgan (CAS 120502–03, CAS 120545–46); Tirphul (ZSI 13105); SE of Zehak (along the Iran-Afghanistan border, Agricultural College) (1450 ft.) (MVZ 243502) [see pl. 14, fig. 2 for distribution].

REMARKS.— There is an additional specimen from Afghanistan without a detailed locality in the AMNH collection (AMNH R-70593). Boulenger (1889:104) additionally mentioned specimens as “*Echis arenicola*” from “Nushki to Helmand” and “Chil-gaz”. The former BMNH specimen from “Tirphul” was subsequently donated to the ZSI collection (ZSI 13105) and mentioned by Sclater (1891:69) as “*Echis carinata*” from “Tiphul near Herat”, collected by the Afghan Boundary Commission (Aitchison 1889). The other two specimens may be identical with BMNH 1886.9.21.123–124, but it is not possible to refer them to the specific locality.

***Eristicophis macmahoni* Alcock and Finn, 1897:564, pl. XV**

1897 “1896” *Eristicophis macmahonii* Alcock and Finn, An account of the Reptilia collected by Dr. F.P. Maynard, Captain A.H. McMahon, C.I.E., and the members of the Afghan-Baluch Boundary Commission of 1896. Journal of the Asiatic Society of Bengal 65:550–566, pls. XI–XV.

SYNTYPES.— ZSI 14179–84, from “Amirchah, 3300 feet elevation;” “Zeh, 2500 feet elevation;” “Drana Koh;” and “Robot I., 4300 feet elevation.”

LOCALITIES.— 10 km NE of Darweshan (CAS 120504); 40 km W of Kandahar (MZUF 24165) [see pl. 14, fig. 3 for distribution].

REMARKS.— Clark (1990) mentioned two specimens from Darweshan, but only one is catalogued in the CAS collection. The whereabouts of the other specimen is unknown. One of the two specimens was found in the morning on sand surface, the other one dead on firmer dune margins, thus suggesting that the latter one may not have been collected.

***Gloydus halys boehmei* (Nilson, 1983:479, fig. 1)**

1983 *Agkistrodon halys boehmei* Nilson, A new subspecies of the Asiatic pit viper *Agkistrodon halys* Pallas, 1776 (Serpentes, Viperidae) from Afghanistan. *Bonner zoologische Beiträge* 34(4):469–476.

HOLOTYPE.— ZFMK 8648 from “Andarab valley, province of Baghlan, at 2500 m altitude, east Afghanistan”. The paratype is ZFMK 8649 (= ZMK 2637), with the same locality as the holotype.

LOCALITIES.— Andarab Valley [Baghlan Prov., 2500 m] (ZFMK 8648–49) [see pl. 14, fig. 4 for distribution].

REMARKS.— Leviton and Anderson (1970) mentioned this species (as *Agkistrodon halys*) from a single record of the Universitetets Zoologiske Museum, Copenhagen from the Sauzak Pass near Herat. This specimen was later identified by Nilson (1983) as “*Gloydus intermedius caucasicus*” (see below). However, the same author also described a subspecies of *Gloydus halys* from Afghanistan and, therefore, this species is indeed part of the Afghan herpetofauna. The paratype specimen ZFMK 8649 was later (1972) donated to the Zoological Museum in Kabul (ZMK) and is now lost.

***Gloydus halys caucasicus* (Nikolskii, 1916:274)**

1916 *Ancistrodon halys caucasicus* Nikolskii, Fauna Rossij i sopredelnykh stran. *Presmykajuszczijasja*. Tom II. Ophidia [Faune de la Russie et des pays limitrophes. Reptiles (Reptilia). Vol. II. Ophidia]. Tipografija Imperatorskoj Akademii Nauk, Petrograd [St. Petersburg], Russia. III + 349 + (1) pp., pls. I–VIII.

LECTOTYPE.— MNKNU 14942, from “Dzhi vill., Arussk. Obshch., Lenkoran uezd [Dzhi village, Lenkoran district, Azerbaijan]” (designated by Vedmederya et al. [2009])

LOCALITIES.— Sauzak Pass, nr. Herat (ZMUC R-6912) [see pl. 14, fig. 5 for distribution].

REMARKS.— Leviton and Anderson (1970) mentioned this species as *Agkistrodon halys* from a single record of the Universitetets Zoologiske Museum, Copenhagen. Later, Nilson (1983) recognized it as the taxon *caucasicus* and placed it as subspecies into *Gloydus intermedius*. However, some authors (e.g., David and Ineich 1999, Orlov and Barabanov “1999” 2000, Gumprecht et al. 2004, Sindaco et al. 2013) accepted it as the same subspecies, but placed it again into *G. halys*. In any case, according to Gloyd and Conant (1982), this represents the easternmost record for the taxon *caucasicus*.

In 2000, Orlov and Barabanov (“1999” 2000) designated ZISP 19017.1 from “Azerbaijan, Lenkoran District, vicinity of the Kirovsk town” as neotype, stating that all original types were lost. However, Vedmederya et al. (2009) were able to show that one of the syntypes still existed and designated it as the lectotype.

***Macrovipera lebetina* (Linnaeus, 1758:218) - complex**

1758 *Coluber Lebetinus* Linnaeus, *Systema Naturæ per Regna Tria Naturæ, Secundum Classes, Ordines, Gen-*

era, Species, cum Characteribus, Differentiis, Synonymis, Locis. Tomus I. Editio decima, reformata. Laurentii Salvii, Holmiæ (Stockholm), Sweden. (4) + 823 + (I) pp.

TYPE.— Not located, from “Habitat in Oriente.”

SYNONYMS.— *Vipera peilei* Murray, 1892 from “Zandra. S. Afghanistan, Quetta [in Baluchistan, Pakistan]”; types not located.

LOCALITIES.— Jalalabad (FMNH 161139); Wama [Nuristan Prov.] (ZMUC R-6911) [see pl. 14, fig. 6 for distribution].

REMARKS.— Boulenger (1889:104) mentioned four specimens, one each from “Shore-kaltegai”, “Sang-hadji”, “Sang-kotal” and “Mt. Do-Shakh, at Kilki”. Specimens from the first two localities are probably identical with specimens BMNH 1886.9.21.121–122 of *Macrovipera lebetina turanica*. The specimen from “Sang-kotal” was donated to the ZSI collection, whereas the whereabouts of the specimen from “Mt. Do-Shakh at Kilki” is unknown. Sclater (1891:68) mentioned a specimen (ZSI 13137) of “*Vipera lebetina*” from “Sang Kotal [NW Herat]”, collected by the “Boundary Commission (Aitchison 1889)”. This specimen may be identical with the specimen mentioned by Leviton and Anderson (1970, see below) and could represent the subspecies *M. l. turanica*. Leviton and Anderson (1970) mentioned a single record from the Kabul River Valley near Jalalabad. However, they also mentioned a specimen of *Gloydus himalayanus* (Günther, 1864) from the Universitetets Zoologiske Museum, Copenhagen collected at Wama in Nuristan Province. This specimen was later identified by Nilson (1983) as *Macrovipera lebetina*. Leviton and Anderson (1970) also mentioned an occurrence of *M. lebetina* in northwestern Afghanistan (without mentioning specific specimens, but see also above), and this record should be attributed to *M. l. turanica*.

The taxon *Macrovipera lebetina* needs to be clarified. Oraie et al. (*in litt.* David and Ineich 1999:322f.) studied the Iranian populations of the species and recognized the western and northwestern Populations in Iran as the subspecies *obtusata*, and the eastern and northeastern (in the border area to Afghanistan and Turkmenistan) as the subspecies *M. l. chernovi*. According to David and Ineich (1999), Turkmenistan is inhabited only by *M. l. chernovi*, Uzbekistan by *M. l. chernovi* and *M. l. turanica*, Tajikistan by *M. l. turanica*, and Afghanistan solely by *M. l. chernovi*. Moreover, some of the populations in Afghanistan, Pakistan and India that are recognized today as *M. l. chernovi* may be referable to the synonymy of *Vipera peilei*. If the taxa are identical, *chernovi* would be a junior synonym of *peilei* and some of the Afghan populations would represent this taxon. From the aforementioned comments, it is obvious that most likely more than one taxon of the complex is present in Afghanistan. Eastern and western populations could refer to “*Vipera peilei*” or *Macrovipera lebetina chernovi*, whereas specimens from northern Afghanistan could refer to *Macrovipera lebetina turanica*. An occurrence of the latter taxon in Afghanistan is very likely because this taxon was found in Tajikistan directly at the border with Afghanistan (P. Wagner, pers. obs.).

Reptilia: Testudinoidea

Family Testudinidae

Testudo horsfieldii horsfieldii Gray, 1844:7

1844 *Testudo horsfieldii* Gray, Catalogue of Tortoises, Crocodilians, and Amphisbaenians in the Collection of the British Museum. Trustees of the British Museum, London, United Kingdom. viii + 80 pp.

HOLOTYPE.— BMNH 1947.3.4.3 from “Kabul,” Afghanistan.

SYNONYMS.— *Homopus burnesii* Blyth, 1854 from “Afghanistan” (holotype ZSI 793 *vide* Das et al. 1998). *Testudo baluchiorum* Annandale, 1906 from “Baluchistan” (holotype ZSI 11420 *vide* Das et al. 1998).

LOCALITIES.— 24 km SW of Aqcha (CAS 120708); 25 km SW of Aqcha (CAS 120707); Ghazni (MZLU L957/3075); 10 mi. SE Chakansur (CU 11324); Kabul (NMW 10563, inventoried as *T. horsfieldii* sspec. *baluchiorum*); N edge of village of Kara Bagh (CAS 90799–800); Kunduz [Kataghan Prov.] (AFG 13–14); Mazar-i-Sharif (PWC 46); 65–75 km W of Mazar-i-Sharif (CAS 120706); Paghman (FMNH 161207); Seistan [Faizabad Prov.] (ZMUC R-2563) [see pl. 14, fig. 7 for distribution].

REMARKS.— Boulenger (1889: 94) mentioned 12 specimens as “*Testudo horsfieldii*” from “Gulran, Badghis”. Jakeš (1964, *in litt.*; Král 1968) observed this species frequently in the valleys of Wadi-i-Ali Gul (Maimana Prov.) and Wadi-i-Namak Shor (Herat Prov.). Sayer and Zon (1981: 88) also mention one specimen from “Loami”. There is also a series of specimens from Afghanistan without further locality in the FLMNH collections (FLMNH 15522, FLMNH 25780–90, FLMNH 48758).

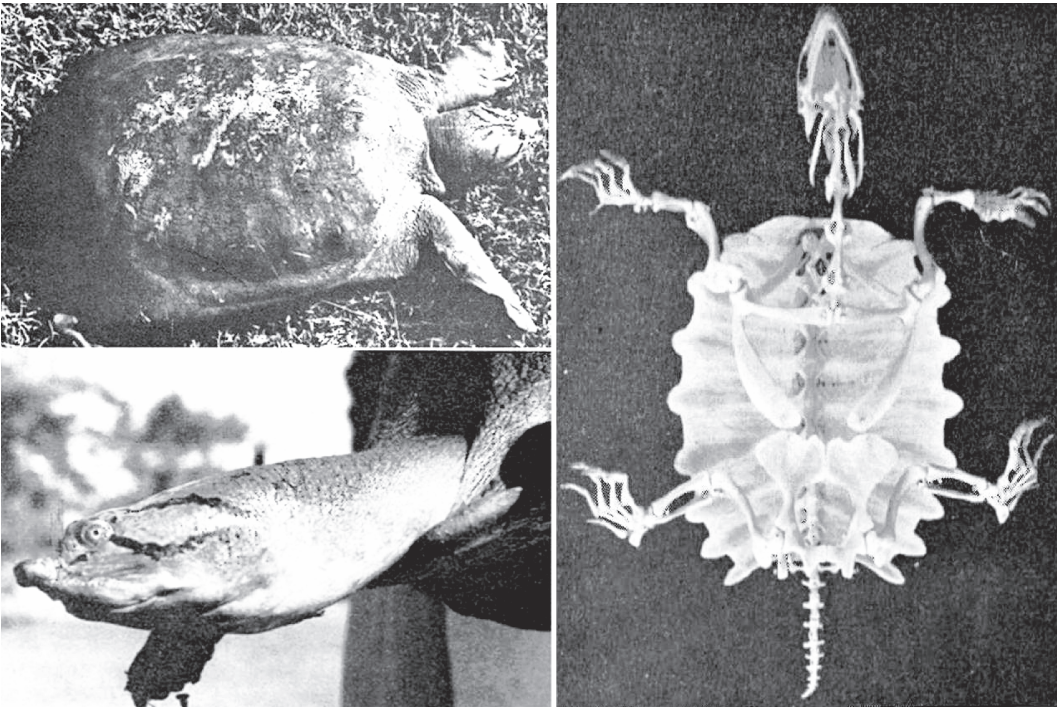


FIGURE 25: The specimen” of *Nilssonina gangetica* from the lost Kabul collection.

Family Trionychidae

Nilssonina gangetica (Cuvier, 1825:203)

1825 *Trionyx gangeticus* Cuvier, Recherches sur les Ossemens Fossiles de Quadrupèdes, où l’on Rétablit les Caractères du plusieurs Espèces d’Animaux que les Révolutions du Globe paroissent avoir Détruites. Dufour & d’Ocagne, Paris. ed. 3, Tome cinquième, II^e Partie. (2) + 548 pp., 33 pls.

SYNTYPES.— MNHN 4148, 9387, 1887–838, A5226 (= 1866–751), from “du Gange” [= Ganges River], India.

LOCALITIES.— Khost [Pakthia Prov.] (specimen uncataloged and presumed lost) [Fig. 22; see pl. 14, fig. 8 for distribution].

REMARKS.— Even though the first record of this species from Afghanistan was published in 1970,

it has rarely been recognized in subsequent literature (except for Dayer and Zon 1981:88). The authors (Schneider and Djalal 1970) found two specimens. One was seen in a garden pond of a German medical practitioner in Khost. The other one was collected near Khost and donated to the Zoological Museum in Kabul where it was catalogued as a skeleton (see Fig. 25). The authors did not give a museum catalog number but presented images (Fig. 25) and a determination of the species supported by Heinz Wermuth. Therefore, without any doubt *N. gangetica* is part of the Afghan herpetofauna.

**Amphibians and reptiles probably present in Afghanistan,
but not yet vouchered by specimens**

Bufonidae: *Bufo pewzowi* Bedriaga, 1898:56

1898 *Bufo viridis* var. *pewzowi* Bedriaga, *Amphibien und Reptilien*. Wissenschaftliche Resultate der von N. M. Przewalski nach Central-Asien unternommenen Reisen/Nauchnuie Rezul'tatui puteshestvii N. M. Przheval'skagho po tzentral'noi Azii. Band III, Zoologischer Theil, Abth.1, Lieferung 1. Akademie der Wissenschaften, St. Petersburg, Russia.1–69, pl. 1.

LECTOTYPE.— ZISP 1818 (designated by Stöck et al. 2001), from “Kokyar (= Pishan, 37°25'N, 77°10'E), Xinjiang, China”.

DISTRIBUTION.— The species is found in isolated oasis populations ranging through Kyrgyzstan and adjacent Russia to eastern Uzbekistan, Tajikistan and the eastern Pamirs in China to western Mongolia.

REMARKS.— This species is mentioned by Das (2014) as *Bufotes pewzowi* for Afghanistan but without mentioning any voucher record or a respective publication.

Bufonidae: *Duttaphrynus olivaceus* (Blanford, 1874:35)

1874 *Bufo olivaceus* Blanford, *Descriptions of new reptiles and amphibia from Persia and Baluchistan*. Annals and Magazine of Natural History, ser. 4, 14:31–35.

LECTOTYPE.— BMNH 74.11.23.122, from “Dasht, Baluchistan” Iran, designated by Balleto et al. (1985).

DISTRIBUTION.— Found in southeastern Iran and from extreme western Balochistan (Pakistan) to the Gurgaon District (Haryana state) in India.

REMARKS.— Because of the disjunct distribution range in Iran and Pakistan/India, it is very likely that this species occurs in southern Afghanistan. The species is mentioned by Das (2014) for the country but without mentioning any voucher specimens or a respective publication.

Agamidae: *Phrynocephalus ornatus vindumi* Golubev, 1998:163, fig. 1a, 2

1998 *Phrynocephalus ornatus vindumi* Golubev, A new subspecies of *Phrynocephalus ornatus* Boulenger (Reptilia: Agamidae) from eastern Iran, with a key to south-western and Middle-Asian Microphrynocephalids. Hamadryad 23(2):162–168.

HOLOTYPE.— CAS 141204, from “Iran, Khorasan Prov., 35 km N of Gonabad on road to Torbat-E. Heydariyeh (ca. 34°49'N, 58°47'E), 850 m. elevation”.

DISTRIBUTION.— In Iran it occurs in the eastern part of Kavir-i-Namak Desert, along NE slopes of Kelat (Qalat) Range, and Kayen Mountains at the Iranian-Afghanistan border.

REMARKS.— As this species is recognized from the Iranian side of the border with Afghanistan, there is a high possibility that it also occurs on the Afghan side.

Gekkonidae: *Cyrtopodion agamuroides* (Nikolskii, 1900:384)

1900 “1899” *Gymnodactylus agamuroides* Nikolskii, Reptiles, amphibiens et poissons, recueillis pendant le voyage de Mr. N. A. Zaroudny en 1898 dans la Perse. *Annuaire Musée Zoologique de l’Académie Impériale des Sciences de St.-Petersbourg*, 4:375–417, pl. XX.

LECTOTYPE.— ZISP 9327 from “Pendsch’ Sara in Kirmano orient.”, E Kerman Prov., Iran designated by Szczerbak and Golubev (1986).

DISTRIBUTION.— Known from Iran and Pakistan (Šmíd et al. 2014).

REMARKS.— As this species is recognized from the Iranian side of the border with Afghanistan, there is a high possibility that it also occurs on the Afghan side. Šmíd et al. (2014) already mentioned it for Afghanistan but failed to present a reference or voucher specimen.

Gekkonidae: *Cyrtopodion kirmanense* (Nikolskii, 1900:381)

1900 *Gymnodactylus kirmanense* Nikolskii, Reptiles, amphibiens et poissons, recueillis pendant le voyage de Mr. N. A. Zaroudny en 1898 dans la Perse. *Annuaire Musée Zoologique de l’Académie Impériale des Sciences de St.-Petersbourg*, 4 [1899]:375–417, pl. XX.

LECTOTYPE.— ZISP 9220B from “Mons Kuh-i-Tuftan in Sargado”, Iran designated by Szczerbak and Golubev (1986).

DISTRIBUTION.— Known only from Iran (Šmíd et al. 2014).

REMARKS.— As this species is recognized from the Iranian side of the border with Afghanistan, there is a high possibility that it also occurs on the Afghan side.

Gekkonidae: *Mediodactylus russowii* (Strauch, 1887:49, figs. 10, 11, 12)

1887 *Gymnodactylus Russowii* Strauch, Bemerkungen über die Geckoniden-Sammlung im zoologischen Museum der kaiserlichen Akademie der Wissenschaften zu St. Petersburg. *Mémoires de l’Académie Impériale des Sciences de St. Pétersbourg, Phys.-Math. Classe, St. Pétersbourg, ser. 7, 35(2):(2), 1–72, 1 pl.*

LECTOTYPE.— ZISP 3658 from “30 km east of Fort Shevchenko (formerly Fort Alexandrowsk), Kazakhstan, on the Mangyschak Peninsula” Designated by Szczerbak and Golubev (1986).

DISTRIBUTION.— S Russia, Kazakhstan, Turkmenistan, Uzbekistan, Kyrgyzstan, Tajikistan, NE Iran, China.

REMARKS.— As this species is recognized from the Iranian and Tajikistan side of the border with Afghanistan, there is a high possibility that it also occurs on the Afghan side. Šmíd et al. (2014) already mentioned it for Afghanistan but failed to provide a reference.

Gekkonidae: *Tenuidactylus longipes* (Nikolskii, 1896:369)

1896 *Gymnodactylus longipes* Nikolskii, Diagnoses reptilium et amphibiorum novorum in Persia orientali a N. Zarudny collectorum. *Annuaire Musée Zoologique de l’Académie Impériale des Sciences de St.-Petersbourg*, 1:369–372.

LECTOTYPE.— ZISP 8810 from “Tedzhen”, S Turkmenistan, designated by Szczerbak and Golubev (1986).

DISTRIBUTION.— Turkmenistan, E Iran.

REMARKS.— As this species is recognized from the Iranian side of the border with Afghanistan, there is a high possibility that it also occurs on the Afghan side. Šmíd et al. (2014) already mentioned it for Afghanistan but did not provide a reference. Alternatively, the record may be a hold-over from the time *Cyrtopodion voraginosus* was recognized as subspecies of *Cyrtopodion longipes*.

Lacertidae: *Acanthodactylus micropholis* **Blanford, 1874:33**

1874 *Acanthodactylus micropholis* Blanford, Descriptions of new Reptilia and Amphibia from Persia and Baluchistan. Annals and Magazine of Natural History, ser. 4, 14:31–35.

SYNTYPES.— BMNH 74.11.23.79 from “Rigan”; BMNH 1946.9.3.71–72 (formerly BMNH 1874.11.23.76–77) from “Magas”; BMNH 74.11.23.78 from “Bampur”; ZSI 5301 from “Magras” and ZMB 9333 from “Zamran”.

DISTRIBUTION.— Known from SE Iran and SW Pakistan.

REMARKS.— Although this species is sometimes listed for Afghanistan (e.g., Uetz and Hošek 2016), we could identify no confirmed records from the country. Salvador (1982) and Sindaco and Jeremčenko (2008) likewise do not recognize this lizard from Afghanistan. However, there are records from the border area between Pakistan and Afghanistan and an occurrence on the Afghan side is possible.

Scincidae: *Ophiomorus breviceps* (**Blanford, 1874:33**)

1874 *Zygnopsis brevipes* Blanford, Descriptions of new Reptilia and Amphibia from Persia and Baluchistan. Annals and Magazine of Natural History, ser. 4, 14:31–35.

HOLOTYPE.— ZSI 3464 from “Sáadatabád, S.W. of Karman [Kerman], Persia [= Iran]” (*vide* Das et al. 1998).

DISTRIBUTION.— E Iran, SW Pakistan.

REMARKS.— As this species is recognized from the Iranian side of the border with Afghanistan and in Pakistan, there is a high possibility that it also occurs on the Afghan side.

Scincidae: *Ophiomorus chernovi* **Anderson and Leviton, 1966:503, figs. 2a–b, 3a**

1966 *Ophiomorus chernovi* Anderson and Leviton, A review of the genus *Ophiomorus* (Sauria: Scincidae), with descriptions of three new forms. Proceedings of the California Academy of Sciences ser. 4, 33(16):499–534.

HOLOTYPE.— BMNH 91.10.6.25, from “Turkmen: Pul-i-Khatun, at confluence of Geshef-Rud and Hari-Rud.”

DISTRIBUTION.— Southern Turkmenistan (near the border between Iran and Afghanistan) and NE Iran.

REMARKS.— As this species occurs in Iran and Turkmenistan near the border with Afghanistan, a presence in Afghanistan is possible.

Colubridae: *Lycodon striatus bicolor* (**Nikolskii, 1903:96**)

1903 *Contia bicolor* Nikolskii, Sur trois nouvelles espèces de reptiles, recueillis par Mr. N. Zarudny dans la Perse orientale en 1901. [in Russian and Latin] Annuaire Musée Zoologique de l’Académie Impériale des Sciences de St.-Pétersbourg 8:95–98.

SYNTYPES.— ZIS 10006, 10013, from “Persia orientalis” and from “Transcaspia. Kulkulab”.

DISTRIBUTION.— E and NE Iran, S Turkmenistan, Uzbekistan and W Tajikistan.

REMARKS.— Leviton and Anderson (1970) mentioned no specimens found in Afghanistan but there is a record of the species from the Iranian part of the Sistan Basin. Therefore, an occurrence of the species in Afghanistan is possible.

Elapidae: *Bungarus caeruleus* (Schneider, 1801: 284)

1801 *Pseudoboa caerulea* Schneider, *Historiae Amphibiorum naturalis et literariae. Fasciculus secundus continens Crocodilos, Scincos, Chamaesauras, Boas. Pseudoboas, Elapes, Angues. Amphisbaenas et Caecili- as.* Fried. Frommann, Jena, Germany. vi + 374 pp., 2 pls.

SYNTYPE.— ZMB 2787 from “India orientali” is the surviving syntype (*vide* Bauer 1998). Two other syntypes are a dry specimen in Schneider’s own collection and a specimen figured on plate I of Russell (1796), both now lost (Bauer 2015).

DISTRIBUTION.— Most of South Asia from southwestern Pakistan to Bangladesh and northeast India, south through Peninsular India and Sri Lanka and north to Kashmir and northern Pakistan, including the border region with Afghanistan.

REMARKS.— Král (1969) recorded *B. caeruleus* from eastern Afghanistan, but this record should be reexamined and is here interpreted as referable to *B. sindanus*. Masroor (2012) mapped several localities of *B. caeruleus* in Pakistan that are near the Afghan-Pakistan border, so an occurrence within the borders of Afghanistan is possible.

Viperidae: *Pseudocerastes persicus* (Duméril, Bibron, and Duméril, 1854:1443)

1854 *Cerastes persicus* Duméril, Bibron, and Duméril, *Erpétologie Générale ou Histoire Naturelle Complète des Reptiles*, vol. 7 (part 2). Librairie Encyclopédique de Roret, Paris, France. (1), (1), xii, 781–1536 pp., 2 folding tables, pls. 75–84 [see p. 1443 and pl. 78bis].

TYPE(S).— Not located, from “Persia”.

DISTRIBUTION.— From Iraq and Oman to Turkmenistan and India.

REMARKS.— Although Afghanistan is mentioned by some authors for this species, the closest record to this country is from Gomal Pass in Pakistan, which is close to the border with Afghanistan. Leviton and Anderson (1970) mentioned that “while Afghanistan has been included in the distribution of this species by previous authors, we find no documented records”. This latter statement is still correct.

**Species previously mentioned to be present in Afghanistan,
but now considered to be doubtful or absent**

Bufonidae: *Bufo luristanicus* Schmidt, 1952

REMARKS.— This species is recognized in Afghanistan based on a single record from Tanatchiv, 165 km N Kandahar (MZLU L960/3073). However, according to Stöck et al. (2001), this species is only known from few localities in the Zagros Mountains and from Fars Provinces of western Iran. Thus, this record seems doubtful and a reexamination of the specimen is needed.

Ranidae: *Pelophylax ridibundus* (Pallas, 1771)

REMARKS.— Specimens previously mentioned under this name are now recognized as *Pelophylax terentievi* (q.v.).

Agamidae: *Phrynocephalus reticulatus* (Eichwald, 1831)

REMARKS.— Leviton and Anderson (1970) mentioned the taxon *boettgeri* as a subspecies *Phrynocephalus reticulatus*. However, today it is recognized as a synonym or sometimes a subspecies of *P. raddei* (q.v.). Therefore, *Phrynocephalus reticulatus* has to be deleted from the Afghan herpetofauna.

Agamidae: *Trapelus ruderatus* (Olivier, 1804)

REMARKS.— *Trapelus ruderatus* was previously mentioned from Afghanistan by several authors in respect to the taxon *baluchianus* (Smith 1935), which was recognized as subspecies of *T. ruderatus* at the time. However, today this taxon is now treated as synonym of *T. megalonyx* and, therefore, should be referred to under that nomen in the Afghan fauna.

Eublepharidae: *Eublepharis hardwickii* Gray, 1827

REMARKS.— Wettstein (1960) mentioned a specimen from Kandahar donated to K. Lindberg by “Dr. Colognato.” Today we know that this species is restricted to eastern parts of the Indian subcontinent. Therefore, this specimen bears an erroneous locality or refers to *E. afghanicus*.

Gekkonidae: *Alsophylax pipiens* (Pallas, 1827)

REMARKS.— Specimens from Afghanistan previously assigned to this species are now referred to *Altiphylax levitoni* (Golubev and Szczerbak, 1979).

Gekkonidae: *Tenuidactylus fedtschenkoi* (Strauch, 1887)

REMARKS.— To date, *T. fedtschenkoi* is still cited (as *Cyrtopodion fedtschenkoi*) as present in Afghanistan by many authors (e.g., UNEP 2003), even though Clark (1990) explicitly mentioned that this is a mistake due to the misidentification of material collected by him and the Street expedition. These records actually refer to *T. turcmenicus* (q.v.).

Lacertidae: *Eremias guttulata* (Lichtenstein, 1823)

REMARKS.— This species, mentioned e.g., by Leviton and Anderson (1970) with its subspecies *Eremias guttulata watsonana*, has to be deleted from the Afghan herpetofauna, because this subspecies is today regarded as full species and respective localities can be found under this account.

Scincidae: *Eumeces schneiderii princeps* (839)

REMARKS.— The eastern populations of this subspecies are now recognized as *Eumeces schneiderii zarudnyi* (Anderson 1999).

Boidae: *Eryx miliaris* (Pallas, 1773)

REMARKS.— Only one specimen (CAS 84638, from “Chah-i-Angir, Dasht-i-Margo desert”) of this species was mentioned from Afghanistan (Leviton 1959), but Sergius Chernov in 1959 reidentified the specimen as *E. tataricus*.

Colubridae: *Platyiceps ventromaculatus* (Gray, 1834)

REMARKS.— Different authors, e.g., Boulenger (1890) and Leviton (1959), mentioned *P. ventromaculatus* for Afghanistan without details of either localities or specimens. According to Schätti et al. (2014), these records refer to Jan’s Cliff Racer, *P. rhodorachis*.

Elapidae: *Naja naja* (Linnaeus, 1758)

REMARKS.— Previously, *Naja oxiana* was recognized as subspecies of *Naja naja* and, therefore, the latter taxon was mentioned for Afghanistan. Meanwhile, *N. oxiana* is currently treated as full species and *N. naja* has to be deleted from the Afghan herpetofauna inasmuch as no Afghan locality records for the nominotypical subspecies exist.

Viperidae: *Gloydus himalayanus* (Günther, 1864)

REMARKS.— Leviton and Anderson (1970) mention this taxon from a single specimen from Wama in Nuristan Province, present in the collection of the Universitetets Zoologiske Museum, Copenhagen. But, this specimen was subsequently identified by Nilson (1983) as *Macrovipera lebetina* and, therefore, the previous species must be deleted from the Afghan herpetofauna.

DISCUSSION

Leviton (1959) included 67 nominal species in his first checklist of the amphibians and reptiles of Afghanistan and inadvertently omitted *Calotes versicolor*, which was known at this time as well from the country. About a decade later, Leviton and Anderson (1970) increased this number to 101 nominal and subspecific species, mentioning that the knowledge of the Afghan herpetofauna was still incomplete. Herein, we increase the number of known species and subspecies to 118, due to some new descriptions after 1970 (e.g., *Bufo pseudoraddei baturae*, *Altiphylax levitoni*), new country records between 1970 and today (e.g., *Hoplobatrachus tigerinus*, *Bungarus sindanus*, *Nilssonina gangetica*) as well as our new country records (e.g., *Hemidactylus* cf. *brookii*). Other species have been reconsidered during the past few years (e.g., *Pelophylax terentievi*, *T. turkmenicus*) and are therefore new additions to the herpetofauna of Afghanistan, whereas another 18 species have to be deleted (e.g., *Trapelus ruderatus*, *Alsophylax pipiens*, *Tenuidactylus fedtschenkoi*; see checklist above) from this list. Seven taxa (including *Eublepharis afghanicus*) are currently regarded as endemic to Afghanistan. The highest species richness can be found in the Agamidae (26 taxa), the Lacertidae (16 taxa) and the Colubridae (15 taxa). The dominant genus is the lacertid genus *Eremias* with twelve taxa, followed by the agamid genus *Phrynocephalus* with nine taxa. Amphibians (ten taxa, one endemic) and turtles (two taxa) are distinctly poor in species diversity compared with lizards and snakes.

In total, we present records of more than 1000 specimens from 36 museum and private collections. However, records from many larger areas in the country are still lacking. A summary of all records (Fig. 26) shows that the central highlands are especially undercollected, as are the southern, southeastern and easternmost regions and the Wakhan Corridor. However, the latter region is at very high elevation and its species diversity is presumed to be very low. The summary also

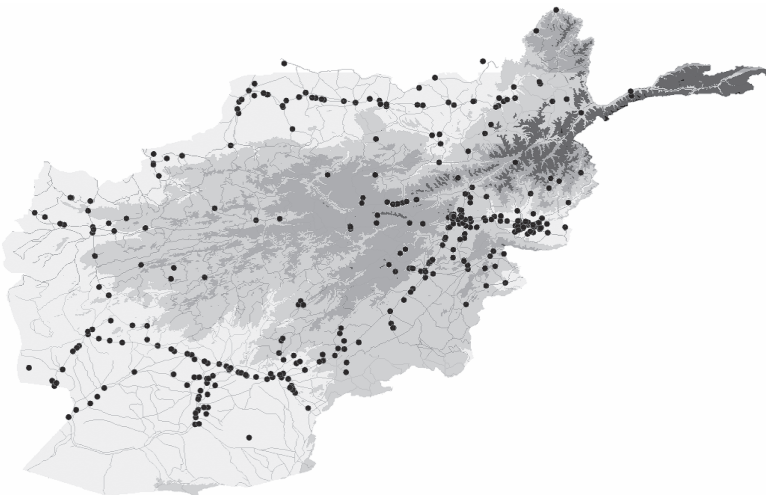


FIGURE 26: Summary of all records from Afghanistan, showing the major collection sites.

shows that most specimens were collected along major roads (Fig. 26), especially between Kabul and Herat. Based upon the number of specimens collected and collecting localities, the most abundant species are *Paralaudakia caucasia*, *Trapelus agilis*, and *Mesalina watsonana*. Other species, especially snakes are very rare and often known from a single record only (e.g., *Hoplobatrachus tigerinus*, *Laudakia tuberculata*, *Eumeces blythianus*, *Eirenis persicus*, *Elaphe dione*, *Oligodon arnensis*, *Nilssonsonia gangetica*).

Afghanistan is known to be a transition zone between the Palearctic and the Oriental zoogeographic regions. However, the diversity of amphibians and reptiles is clearly dominated by Palearctic species which occupy most areas of the country. With 26 species occurring mainly within arid areas of the country, Afghanistan is a distinct hotspot of agamid lizards, but only three species (*Calotes versicolor*, *Laudakia tuberculata*, *Saara hardwickii*) can be associated with the Oriental region. Most records of oriental species are concentrated in the Khost area, including the remarkable records of *Hoplobatrachus tigerinus* and *Nilssonsonia gangetica*. Other species are e.g., *Eublepharis afghanicus*, *Varanus bengalensis*, or *Bungarus sindanus*. Typical Palearctic elements are e.g., *Natrix tessellata*, occurring from Europe to northern Pakistan (Khan 2002), and *Pseudopus apodus*, with roughly the same distribution. Therefore, regarding the herpetodiversity, Afghanistan can be mainly recognized as part of the Palearctic region with some influence from the Oriental region.

This study is based mainly on material present in the biodiversity archives of museums and private collections, as well as some recently collected material, resulting in more than 1000 specimens known from the country. Recognizing that Afghanistan is under war conditions and has been for roughly the past 40 years, this is a surprisingly high number, especially as some larger collections (e.g., BMNH, ZISP, ZSI) have yet to be fully evaluated. This number could also lead to the impression that the Afghan herpetofauna is well explored. However, many areas in Afghanistan are still unknown, and there are as well many unresolved species or species complexes. For instance, the nomenclatural and taxonomical status of *Eublepharis afghanicus* still needs to be resolved and even the correct identities and/or relationships of some taxa from Afghanistan are yet to be established (e.g., *E. afghanicus*, *Gloydus halys boehmei*). The *Bufo viridis* complex (*B. oblongus*, *B. p. baturae*, *B. turanensis*, *B. zugmayeri*), the *Trapelus agilis* complex (*T. agilis*, *T. megalonyx*, *T. sanguinolentus*), as well as some other complexes, e.g., *Eremias persica*/*E. velox*, need to be analyzed in detail to resolve the species status of several taxa and their distributions. The value of this contribution is that it presents a summary of most of the known material from Afghanistan in the form of an up-to-date checklist, and in this regard it should prove useful inasmuch as it provides baseline distributional data for biogeographic as well as conservation studies and can serve as the springboard for additional faunistic studies as well as encourage others to examine and, hopefully, resolve some of the above mentioned taxonomic problems as they relate to the Afghan herpetofauna.

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PLATES 1-14

**Distribution maps showing plots of known locality occurrences for
the amphibians and reptiles in Afghanistan**

Plate 1: (1) *Bufo oblongus*, (2) *B. pseudoraddei baturae*, (3) *B. turanensis*, (4) *B. zugmayeri*, (5) *Duttaphrynus stomaticus*, (6) *Chrysopaa sternosignata*, (7) *Euphlyctis cyanophlyctis*, (8) *Hoplobatrachus tigerinus*

Plate 2: (1) *Pelophylax terentievi*, (2) *Afghanodon mustersi*, (3) *Calotes versicolor farooqi*, (4) *Laudakia agorensis*, (5) *L. m. melanura*, (6) *L. n. nupta*, (7) *L. nuristanica*, (8) *L. tuberculata*

Plate 3: (1) *Paralaudakia badakhshana*, (2) *P. caucasia*, (3) *P. erythrogaster*, (4) *P. himalayana*, (5) *P. lehmanni*, (6) *P. microlepis*, (7) *Phrynocephalus clarkorum*, (8) *P. euptilopus*

Plate 4: (1) *Phrynocephalus interscapularis sogdianus*, (2) *P. luteoguttatus*, (3) *P. m. maculatus*, (4) *P. mystaceus galli*, (5) *P. o. ornatus*, (6) *P. raddei*, (7) *P. scutellatus*, (8) *Saara asmussi*

Plate 5: (1) *Saara hardwickii*, (2) *Trapelus a. agilis*, (3) *T. megalonyx*, (4) *T. s. sanguinolentus*, (5) *Pseudopus a. apodus*, (6) *Eublepharis afghanicus*, (7) *Agamura persica*, (8) *Altiphylax levitoni*

Plate 6: (1) *Bunopus tuberculatus*, (2) *Crossobamon e. eversmanni*, (3) *Cyrtopodion scabrum*, (4) *C. watsoni*, (5) *Hemidactylus brookii*, (6) *H. flaviviridis*, (7) *Tenuidactylus caspius*, (8) *T. turcmenicus*

Plate 7: (1) *Tenuidactylus voraginosus*, (2) *Teratoscincus bedriagai*, (3) *T. keyserlingii*, (4) *T. microlepis*, (5) *T. scincus*, (6) *Acanthodactylus blanfordi*, (7) *A. c. cantoris*, (8) *Eremias acutirostris*

Plate 8: (1) *Eremias afghanistanica*, (2) *E. aria*, (3) *E. fasciata*, (4) *E. grammica*, (5) *E. intermedia*, (6) *E. lineolata*, (7) *E. nigrocellata*, (8) *E. persica*

Plate 9: (1) *Eremias regeli*, (2) *E. velox*, (3) *Mesalina watsonana*, (4) *Ophisops jerdonii*, (5) *Ablepharus grayanus*, (6) *A. lindbergi*, (7) *A. pannonicus*, (8) *A. himalayanus*

Plate 10: (1) *Eumeces blythianus*, (2) *E. schneiderii zarudnyi*, (3) *Eurylepis t. parthianicus*, (4) *Eutropis dissimilis*, (5) *Ophiomorus tridactylus*, (6) *Trachylepis setpentaeniata*, (7) *Varanus b. bengalensis*, (8) *V. griseus caspius*

Plate 11: (1) *Eryx elegans*, (2) *E. johnii persicus*, (3) *E. t. tataricus*, (4) *Boiga trigonata melanocephala*, (5) *Eirenis aff. persicus*, (6) *Elaphe dione*, (7) *Hemorrhhois ravergieri*, (8) *Lytorhynchus maynardi*.

Plate 12: (1) *Lytorhynchus ridgewayi*, (2) *Natrix tessellata*, (3) *Oligodon arnensis*, (4) *O. t. taeniolatus*, (5) *Platycephalus k. karelini*, (6) *P. rhodorachis*, (7) *Ptyas mucosa nigriceps*, (8) *Spalerosophis diadema schirazianus*

Plate 13: (1) *Telescopus rhinopoma*, (2) *Xenochrophis piscator*, (3) *Bungarus sindanus*, (4) *Naja oxiana*, (5) *Psammophis leithii*, (6) *P. lineolatus*, (7) *P. schokari*, (8) *Myriopholis blanfordii*

Plate 14: (1) *Xerotyphlops vermicularis*, (2) *Echis carinatus sochureki*, (3) *Eristicophis macmahoni*, (4) *Gloydus halys boehmei*, (5) *G. halys caucasicus*, (6) *Macrovipera lebetina*, (7) *Testudo h. horsfieldii*, (8) *Nilssonsonia gangetica*

Plate 1

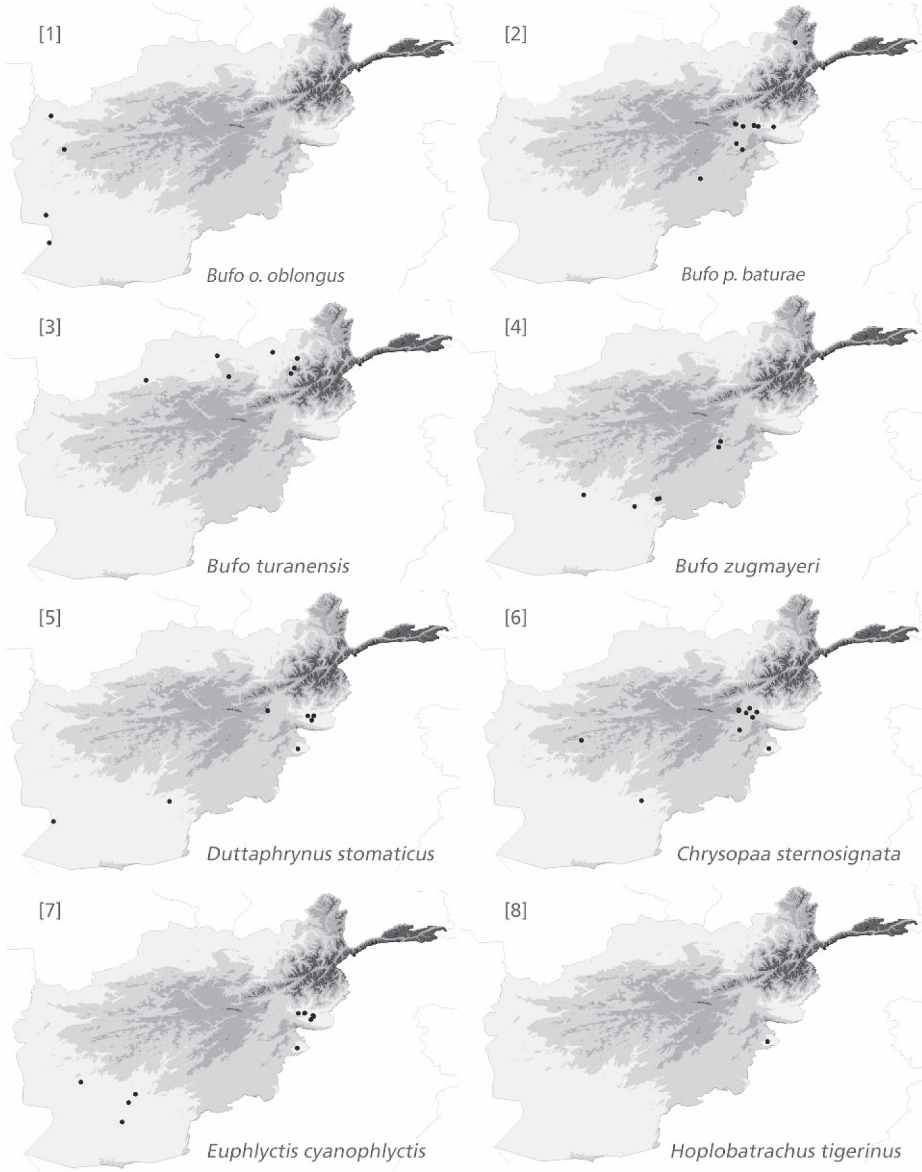


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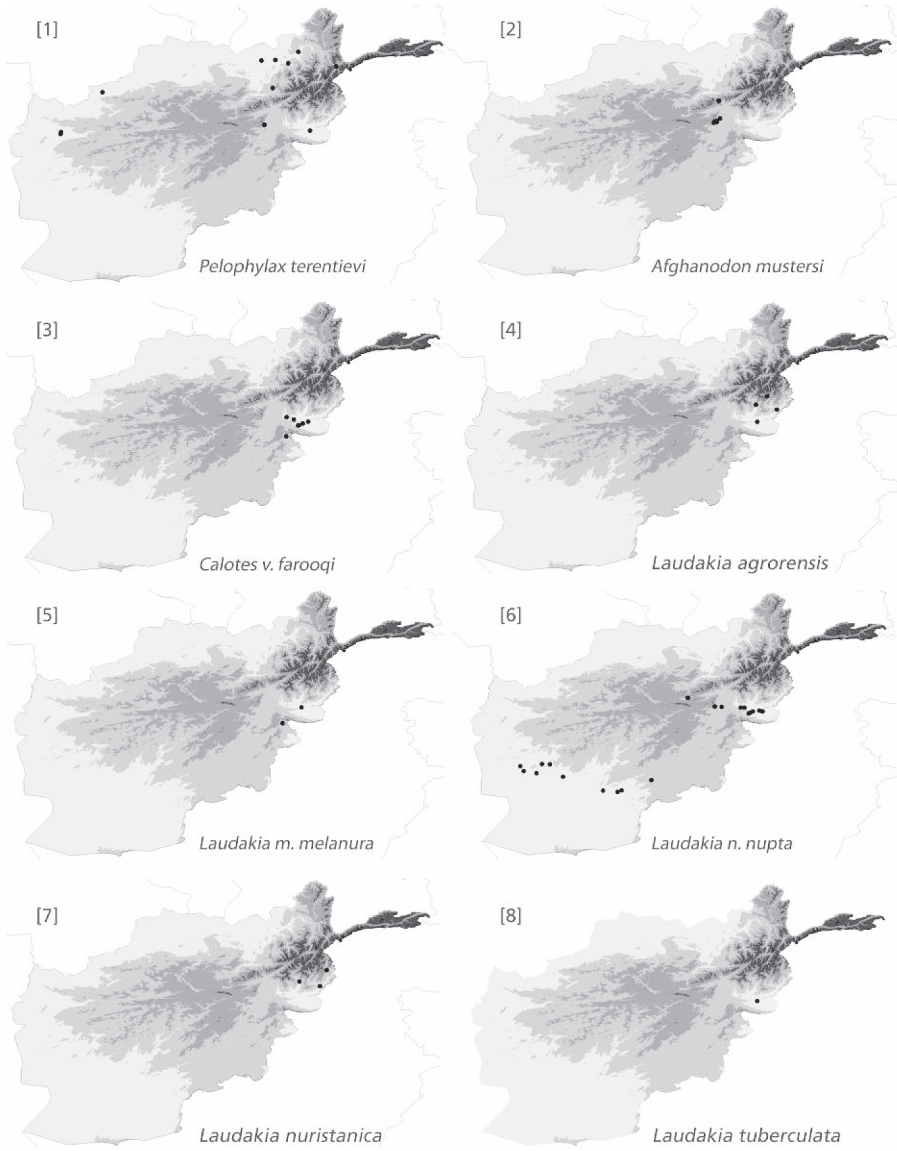


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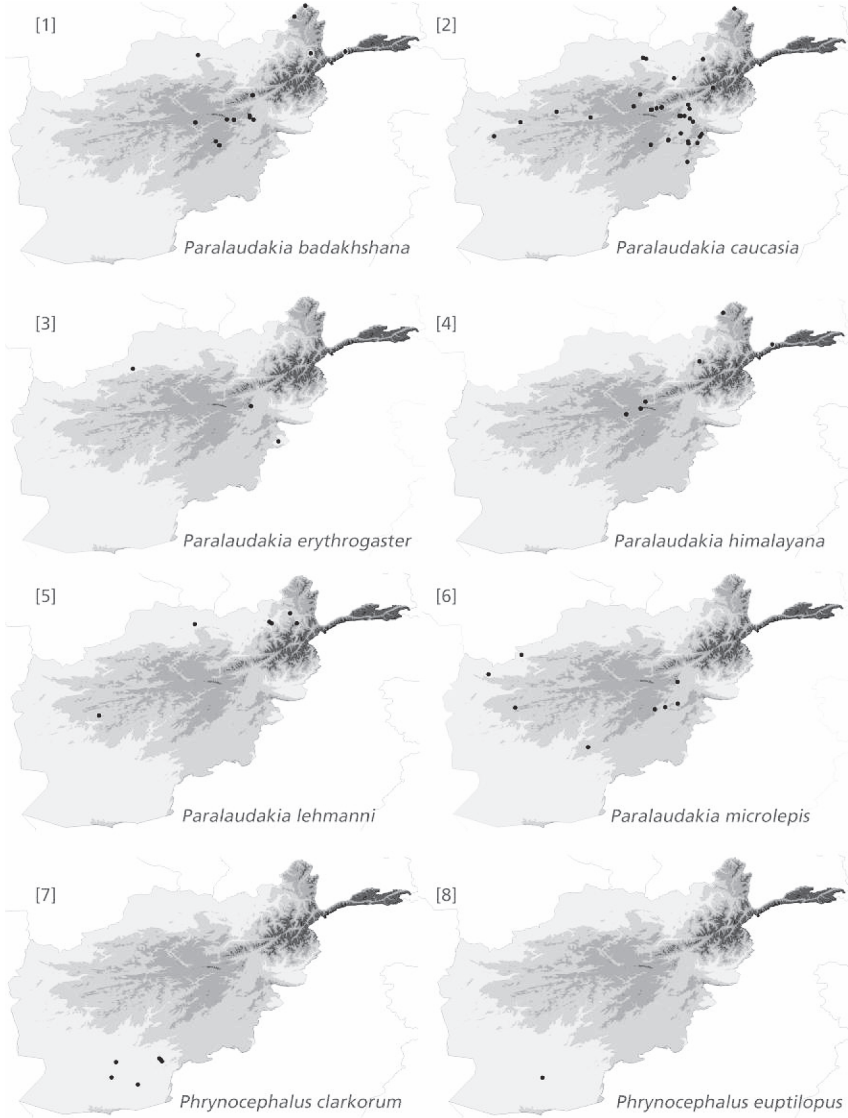


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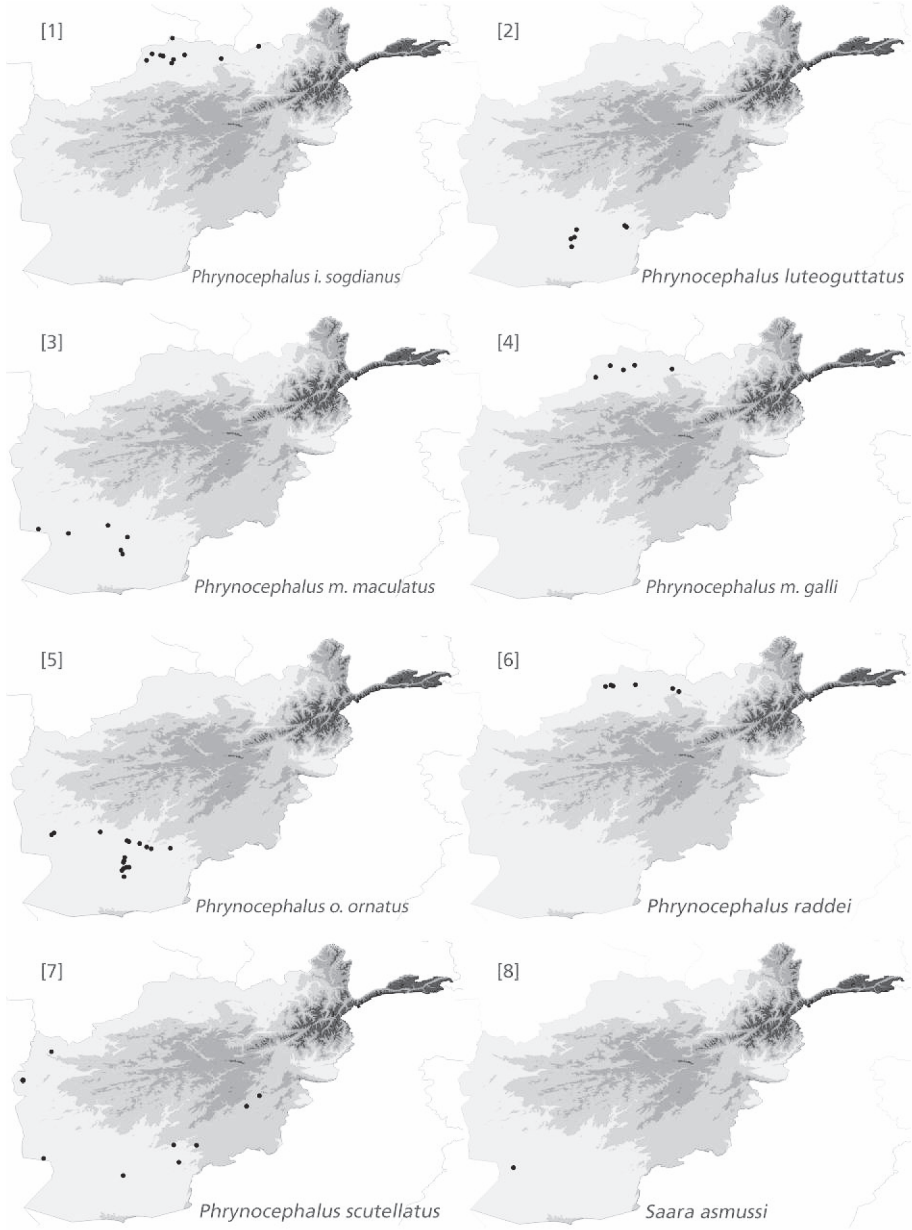


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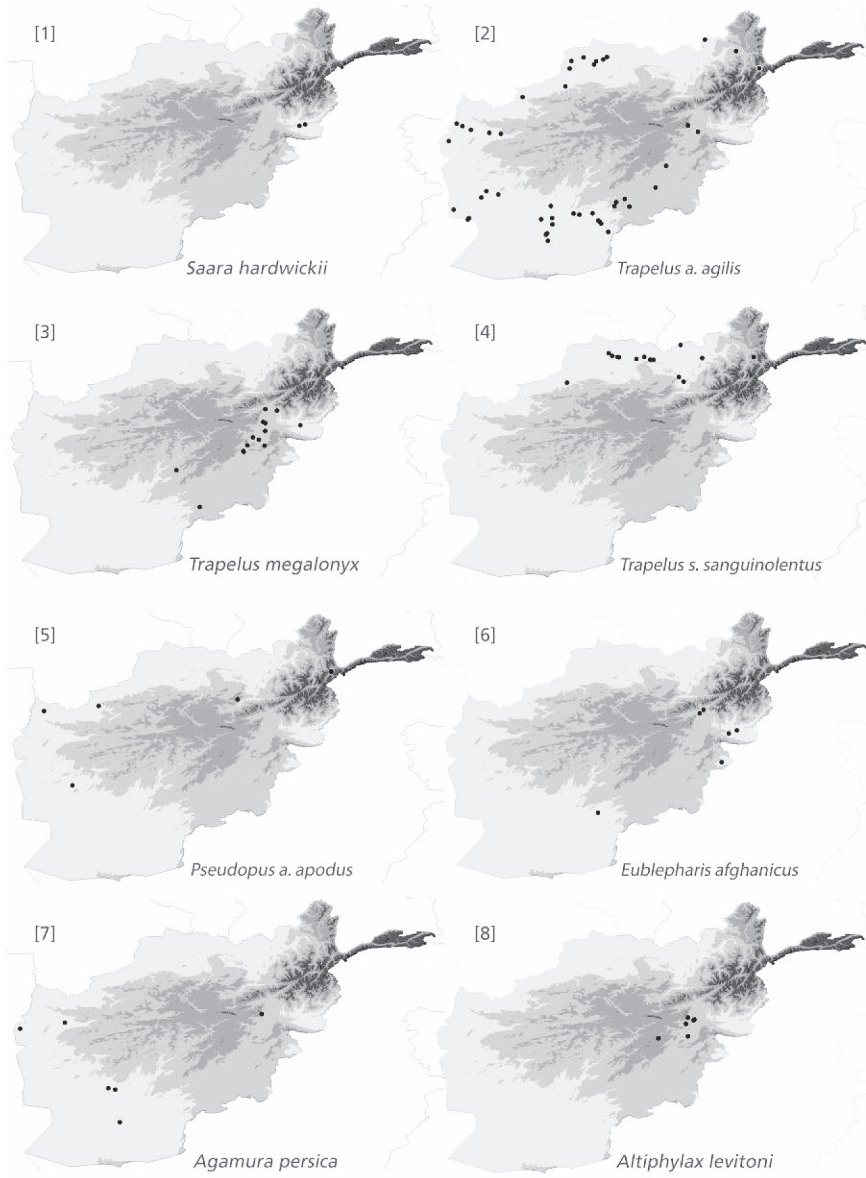


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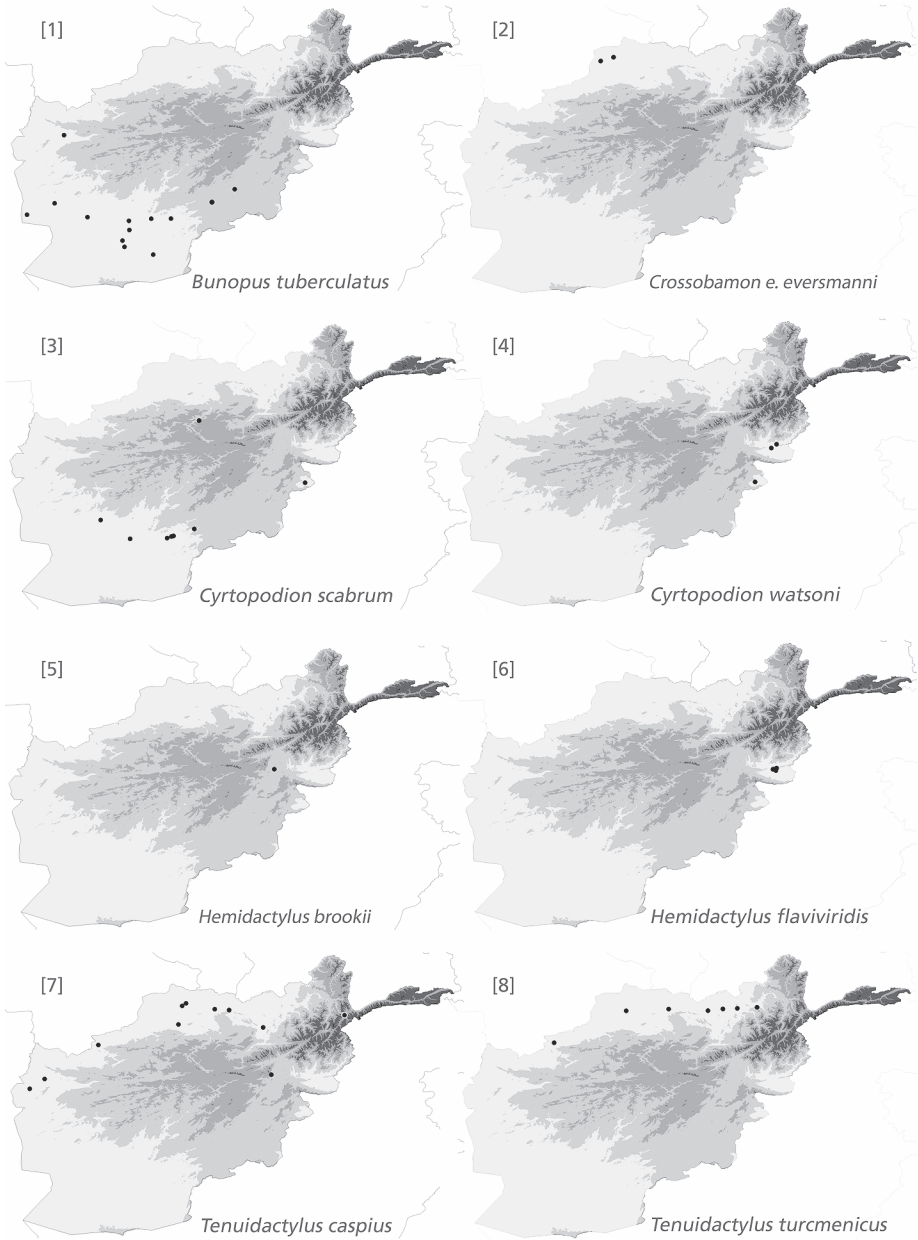


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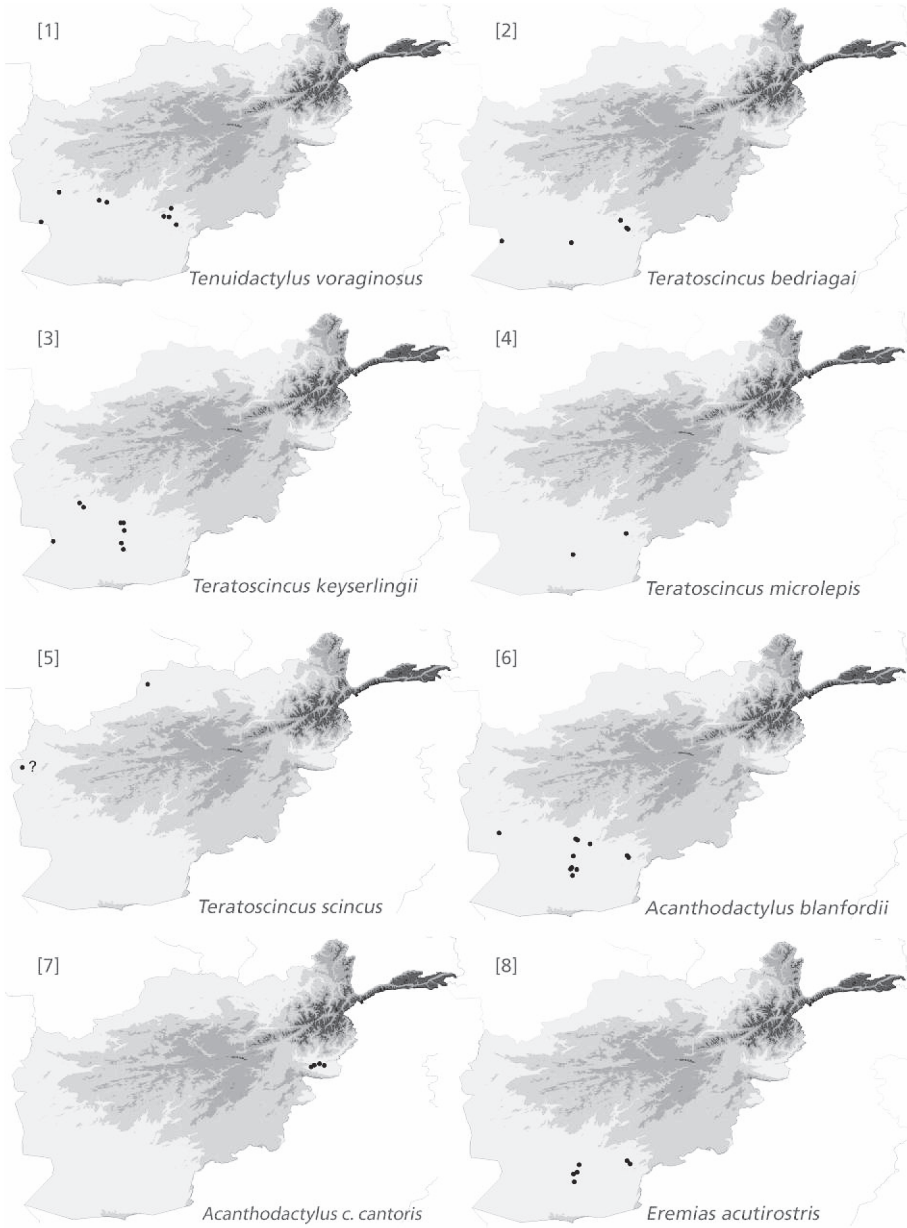


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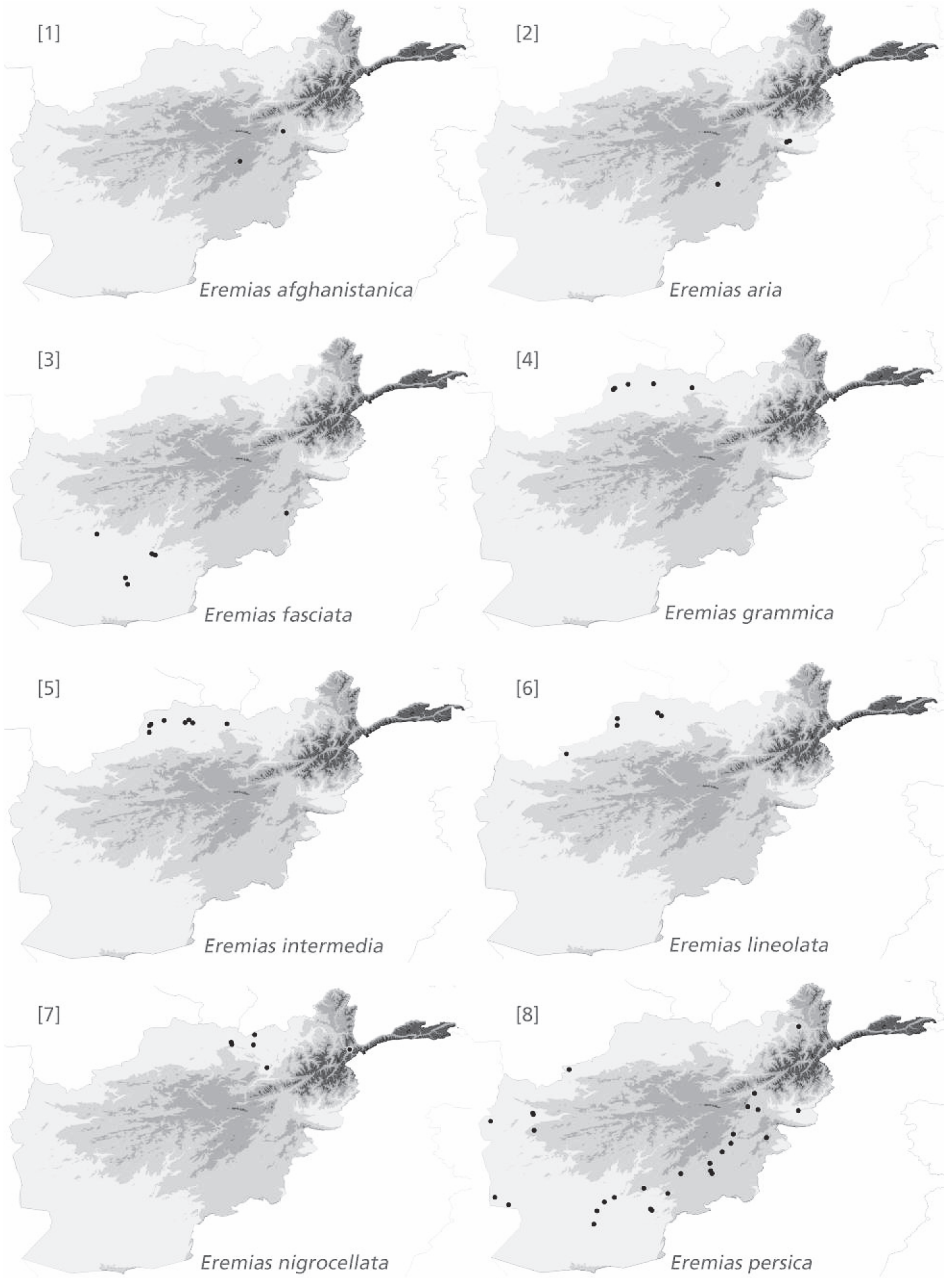


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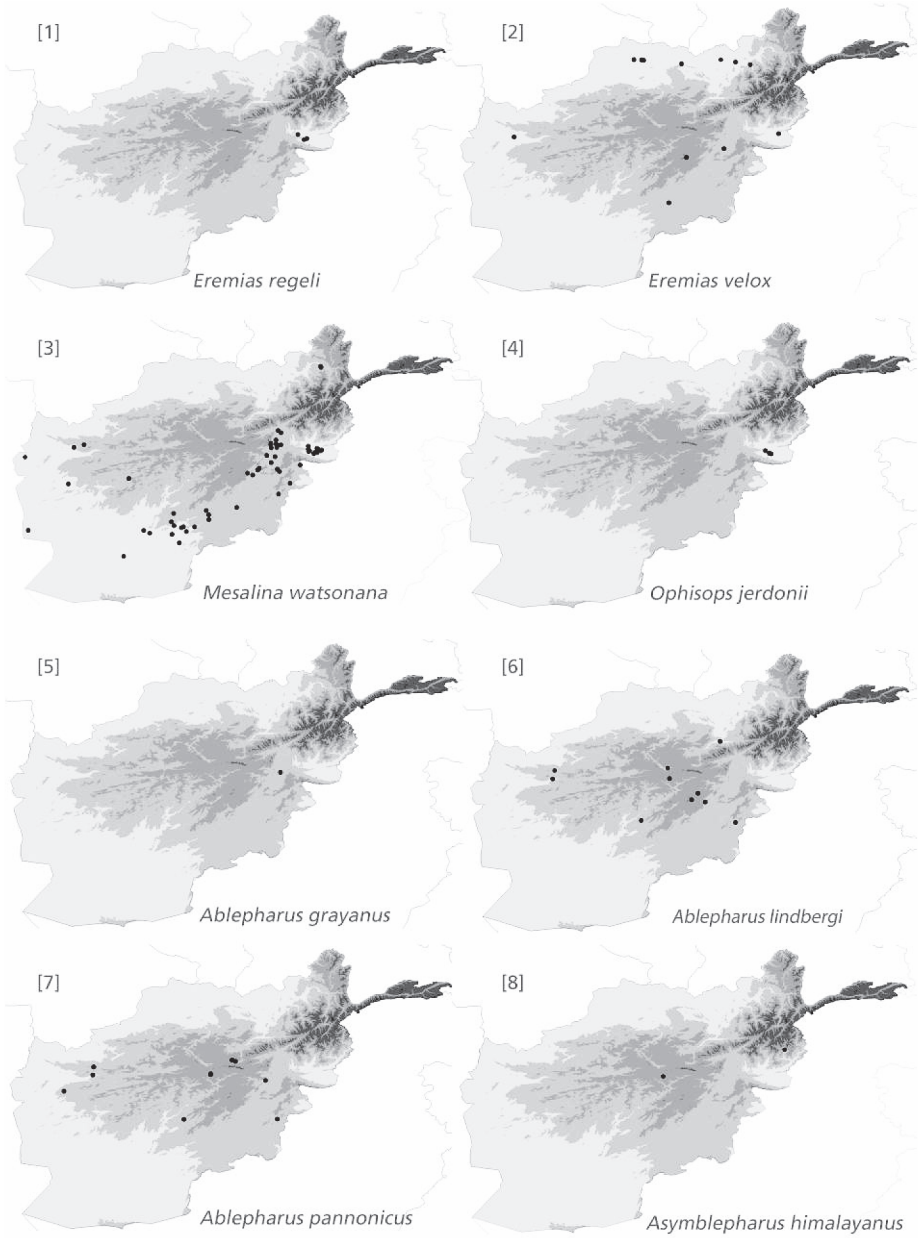


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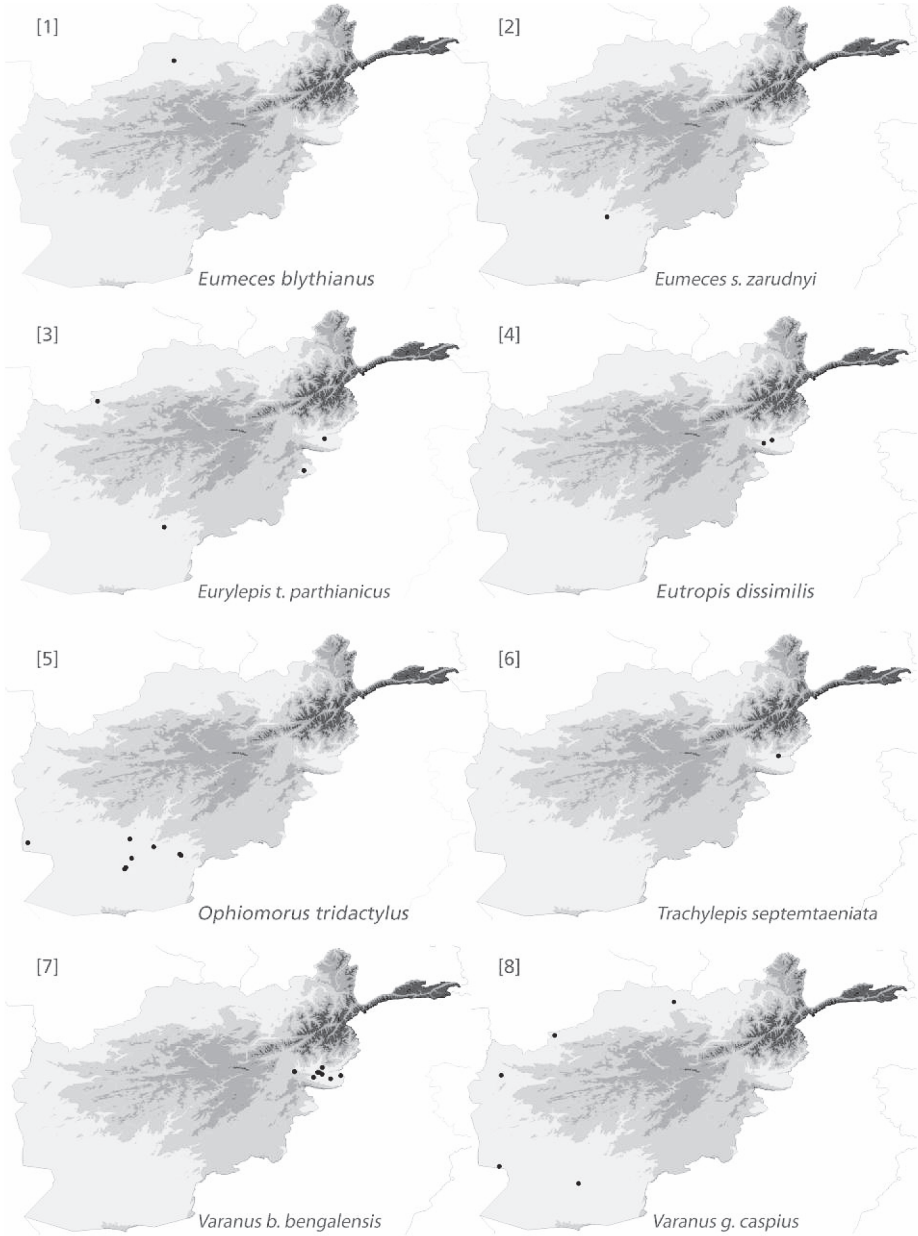


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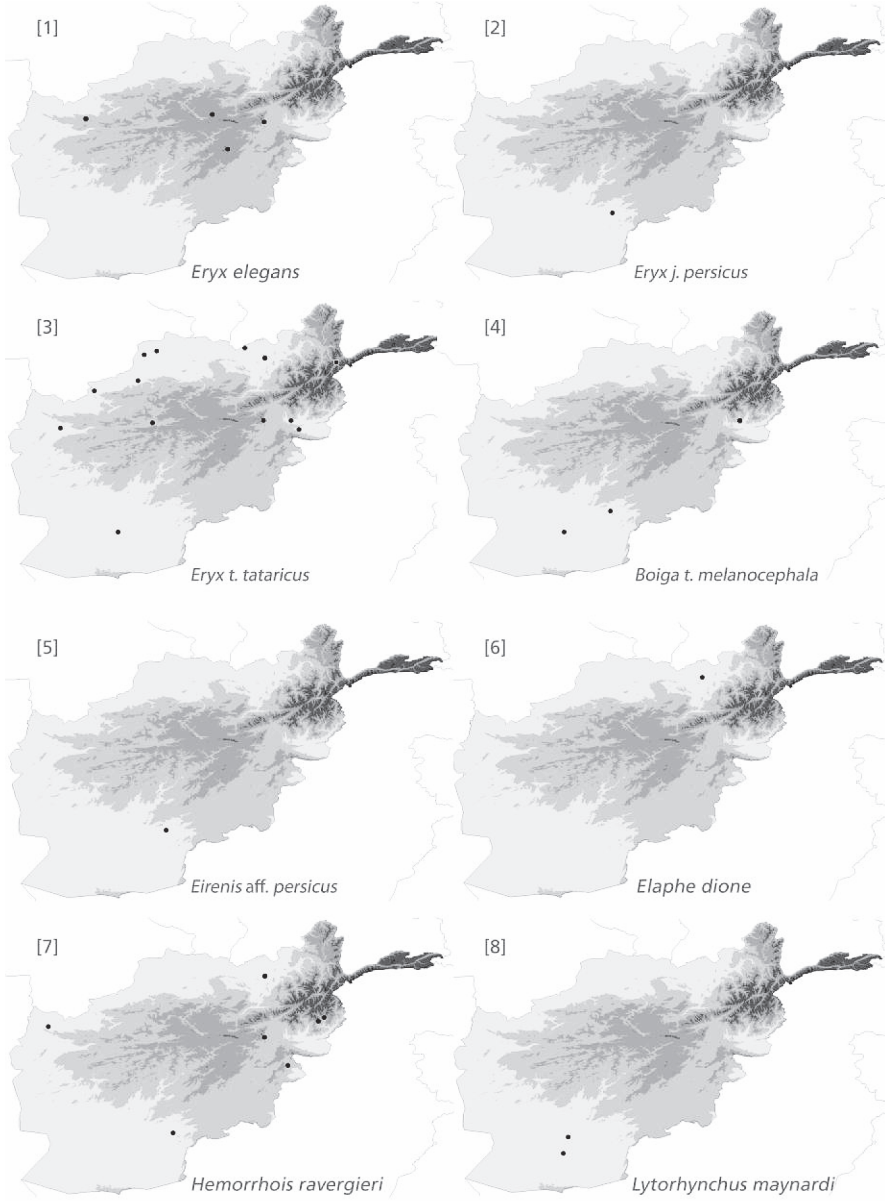


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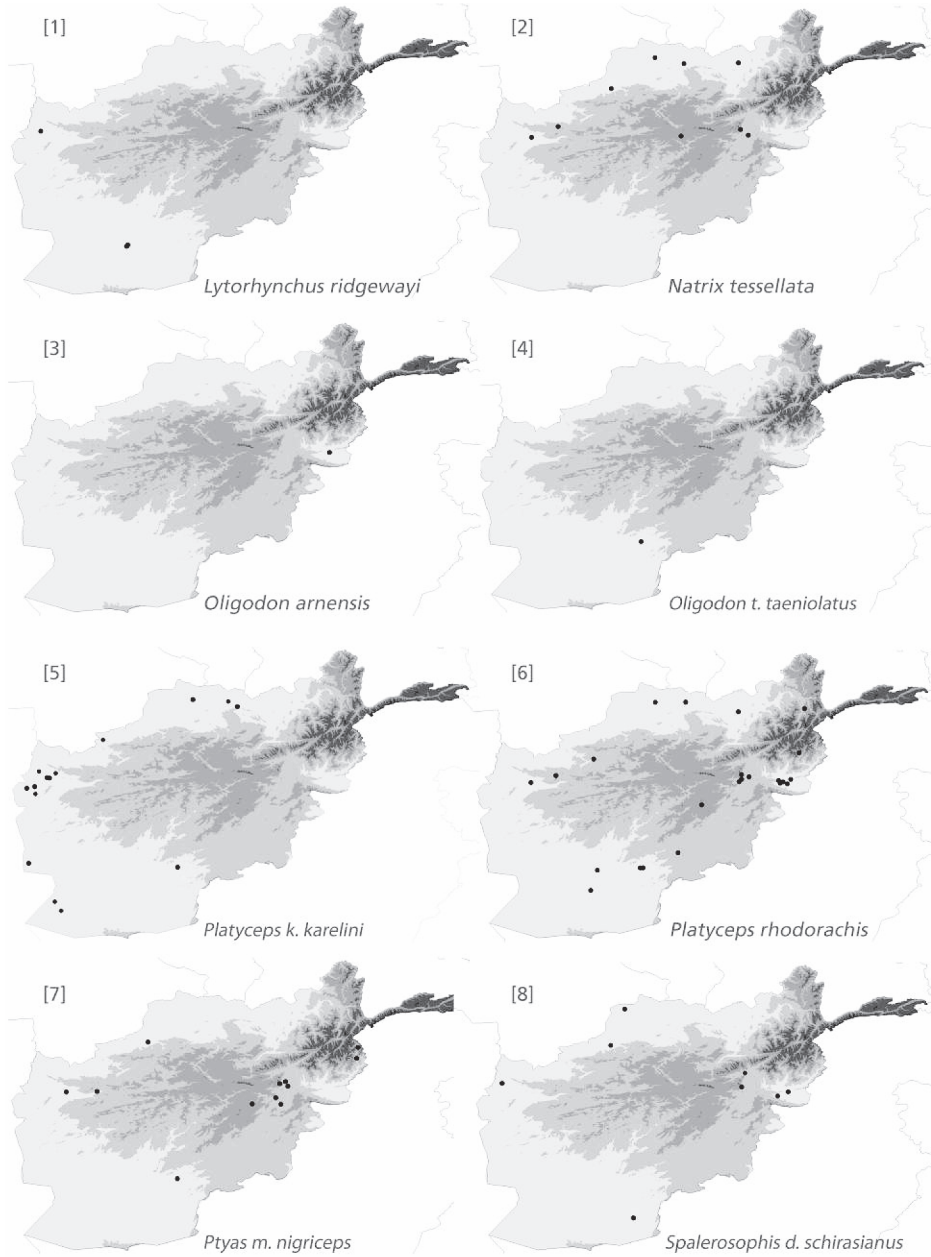


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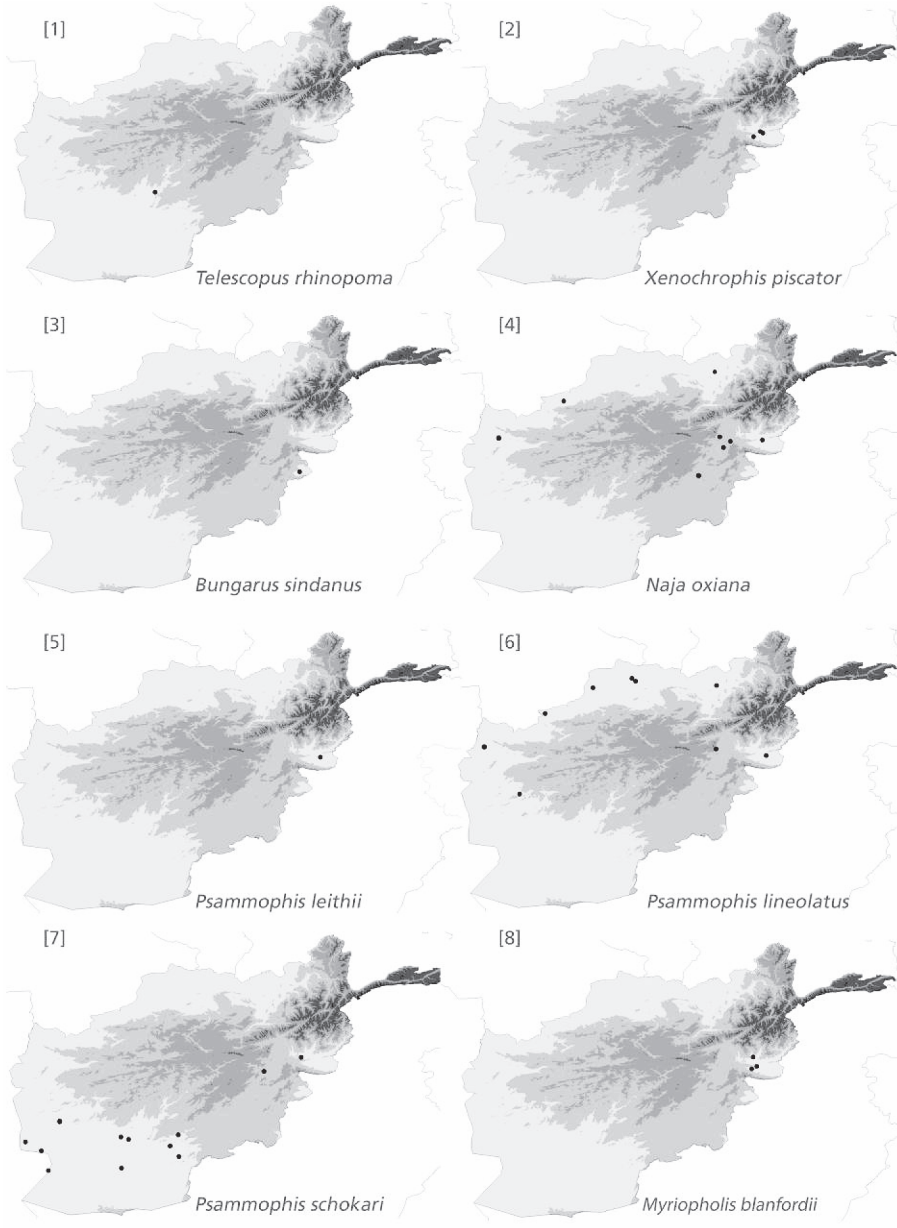
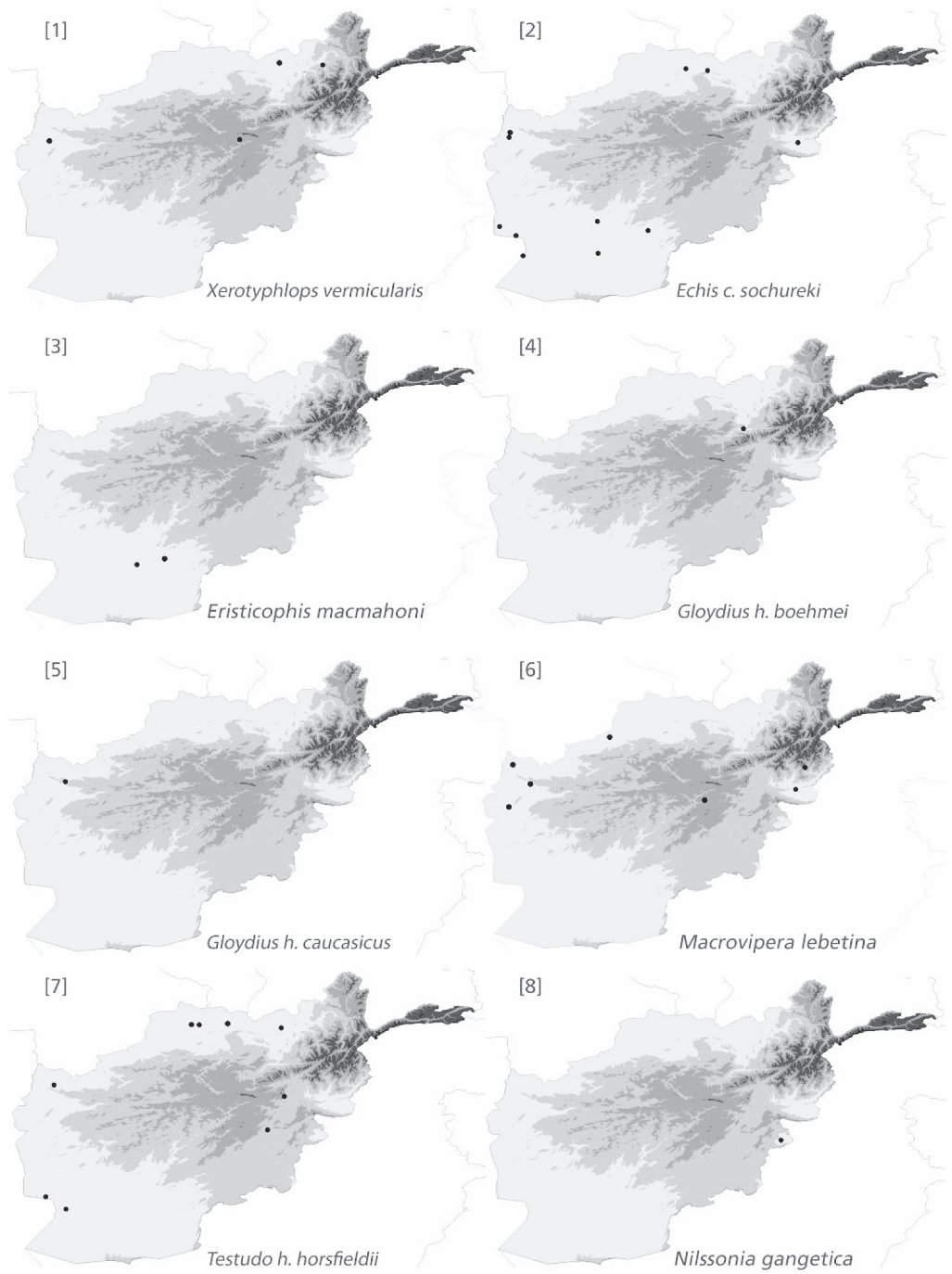


Plate 14



APPENDIX 1

Gazetteer of georeferenced localities. Coordinates presented as decimal degrees.

Assembled from several sources but principally using Google Earth, as well as internal Afghanistan reports.

Locality	Lat	Long	Locality	Lat	Long
Ab-i-Istada [Ghazni Prov., 2000 m]	32.501655	67.832966	Bamian	34.817468	67.817173
Ag Chah [=Aqcha, Mazar-i-Sharif Prov.]	36.91147	66.182785	Bamian (on rd to Saigon), along Kunduz River	34.84424	67.996902
Ag Chah settlement [=Aqcha]	36.91147	66.182785	Bamiyan Hotel, Bamiyan, 1-8km E	34.820004	67.872105
Agtsha [?=Aqcha]	36.91147	66.182785	Band-e-Amir [Bamyan Prov.]	34.83945	67.232866
Ajar Valley	35.367496	67.484837	Band-e-Kadjaki [=Band-e-Kajak]	35.368895	66.593399
Ajdaha, near Bamiyan	34.859454	67.711372	Baqrabad	31.753861	60.999985
Alikhel [=Ali Kheyli]	33.9392	69.7006	Baraki Barak	33.966712	68.949451
Amu-Darya swamps, nr. Darquad	37.000359	68.310013	Baraki Barak, 10 km W	33.966712	68.949451
Amu-Darya, N of Kunduz	37.000359	68.310013	Bataghan [=Kataghan area]	35.813359	69.229431
Anahoy Desert [=Andkhoy]	37.077093	65.224914	between Herat and Islam Qala	34.452218	61.582947
Andarab	35.600509	68.683577	Between Sheberghan and Andkhoy	36.870832	65.464325
Andkhoy	36.945502	65.120544	Bisut area [=Behsud]	34.449954	70.499754
Andkhoy, 10 km SE	36.85545	65.222855	Bokan	35.677379	63.582916
Andkhoy, 20 km S	36.778492	64.983673	Bost, vic. Lashkargah [Helmand Prov., 1000 m]	31.553963	64.365921
Andkhoy, 20 km SE	36.778492	64.983673	Bozgholot, 21 km N of Ghazni	33.749464	68.526764
Andkhoy, 20-32 km S	36.736683	64.936981	btw. Aqtchah and Andkhai	36.760891	65.818176
Andkhoy, 20-50 km S	36.736683	64.936981	btw. Aqtscha [=Aqcha] and Anakhoi [=Andkhoy]	36.760891	65.818176
Andkhoy, 20-50 km S, E of river	36.736683	64.936981	btw. Bamian and Panjao	34.613996	67.529983
Andkhoy, 32-50 km S	36.522881	64.928284	btw. Chuagat und Dukot [?=Darqad]	37.498831	69.500828
Andkhoy, 40-50 km S	36.522881	64.928284	btw. Ghazni and Dasht-e-Nawar	33.513919	68.570251
Andkhoy, 45 km S	36.602299	64.906311	btw. Ghazni and Mukur	33.174342	68.147278
Andkhoy, 50 km S	36.522881	64.928284	btw. Gornails and Bokan, NE of Bala Morhab	33.975823	68.049889
Anhoy [=Andkhoy], 25 km E	36.870832	65.478058	btw. Kunduz and Tashqurghan	36.670622	68.378448
Aqcha, 24 km SE	36.808185	66.368179	btw. Nushki and Helmand	30.448674	65.123291
Aqcha, 24 km SW	36.826875	66.068802	btw. Kabul & Sarobi, nr rd, 30 mi E of Kabul	34.587997	69.718323
Aqcha, 25 km SW	36.826875	66.057816	Cave Khadjah	31.644029	65.5305
Aqtscha [?=Aqcha]	36.912019	66.185045	Cawkae dada, Ski Club Hill	34.455474	68.945889
Armalik [=Armālik]	34.553225	62.827792	Chacharan, 1/2 hr E on Shina River	34.545025	65.697784
Ashab Kahf [=Ālfi Khwājāh]	35.72798	63.867445	Cha-i-Angir	30.906938	64.120788
Badakshan	36.747688	70.805053	Chakansur [= Chakhansur], 10 mi. SE	31.087046	62.150803
Bagram, nr. Tsharikar	34.944488	69.271088	Chamchir ghar (Pandjvai), 25 km SO of Kandahar	31.377089	65.931244
Bala Murghab [=Balamorgab]	35.612651	63.323364	Char-e-Kar [=Charikar]	35.012986	69.169207
Bala Murhab [= Bala Murgab], 2 km N	35.582222	63.331318	Chinkilok	34.516653	61.866656
Balk[h]	36.750576	66.897955	Cia-i-Baloch [= Robat-i-Shah Baloch]	34.125448	60.900878

Locality	Lat	Long	Locality	Lat	Long
Cia-i-Dudi [= Kuh-e Chah Dudi], mountains near	34.101571	61.134567	estuary of the Farah-ruds River	31.512996	61.433716
Cia-i-Lagun	34.168636	60.834618	expiration of the Farah-ruds River	31.512996	61.433716
Dar-e-Nur, vic. Shewrak	34.55577	70.607357	Faisabad	37.112146	70.559235
Darweshan [=Darweshan], 1/2 hr S	30.826781	64.126739	Faizabad, 64 mi by rd E	36.787291	71.069641
Dargh-e-Nedjrab bei Nedjrab [?=Nejrab]	34.964748	69.567947	Farah, 20 km E	32.301063	62.308502
Darrahe Pain Stream, 3 mi N Paghman	34.62685	68.95	Farah, 20 km from	32.505129	62.121277
Darrah-e-Andarab, vic. of Bani	33.422272	63.662567	Farah, 20 mi E	32.266233	62.514496
Darreh-Darang [=Dêrê Dirang]	33.889797	69.896679	Farah, 30 km S	32.166313	61.937714
Daruishan, 12 km SE	31.0116667	64.2783333	Farah, 35 km S	32.126779	61.899261
Daruishan, 12 km SE	31.0116667	64.2783333	Farah-ruds Udlot	32.379961	62.108002
Darulman, vic. of Kabul	34.674441	69.094963	Farakhlum near Garandewal	34.467222	68.132715
Darunta near Jalalabad	34.483531	70.350001	Foothills 10 km NW of Sharisafa [?=Shahr-e Safa]	31.886887	66.510773
Darunta, 20 km WNW Jalalabad	34.483531	70.350001	Gardez	33.599322	69.224653
Darweshan, 10 km N of	31.324314	64.212112	Geresk Basic Health Center	31.823679	64.563975
Darweshan, 10-20 km NE	31.422804	64.49089	Ghaomi-Faringi, approx. 20 mi S Mukur	32.583849	67.784729
Darweshan, 32 km S	30.972899	64.173431	Ghazni	33.551696	68.430862
Darweshan, 35 km S	30.954058	64.162445	Ghazni, 10 km S	33.445193	68.42514
Darweshan, 50 km S	30.694612	64.109802	Ghazni, 15 km N	33.731193	68.499527
Darweshan, 56 km S and 10 km E	30.704058	64.186706	Ghazni, 20 km W	33.620337	68.167191
Dashit-e-Nawar	33.690067	67.743988	Ghazni, 20 mi N	33.708347	68.491058
Dasht, btw. Kunduz and Khulm	36.679433	68.274078	Ghazni, 20km W	33.611188	68.189163
Dasht-e Leila, nr. Seberghan	36.639223	65.758553	Ghazni, 21 km N	33.701666	68.495
Dasht-e-Margo, 70 km NE of Zarandj	31.377089	62.412414	Ghazni, 30 km S	33.234093	68.189163
Dasht-e-Nawur	33.690067	67.743988	Ghazni, 31 km N by Kabul Rd.	33.7816667	68.5583333
Delaram, 16 km NW	32.282489	63.216476	Ghazni, Qa-la-Baqaul [2300 m]	33.551696	68.430862
Delaram, 40 km NW	32.539867	63.214874	Ghirishk, 40 mi W	32.170963	63.41217
Delaram, 65 km NW	32.549128	62.937469	Girishk, 10-18 km E	31.840233	64.349213
Delaram, Farah Rod [river]	32.154687	63.371658	Girishk, 15 km W	31.746854	64.758453
Dibaram [?=Dilaram], 60km Seranj	32.161663	63.415375	Girishk, 18 km E	31.840233	64.349213
Dilaram [=Delaram]	32.161663	63.415375	Girishk, 20 mi E	31.875225	64.288788
Dilaram [=Delaram], 48 km W	32.224419	62.745209	Girishk, 22 km S	31.604271	64.445343
Djabir Ansar	34.705493	69.103088	Girishk, 30 km E	31.660395	64.975433
Djaouz, Kouhqorogh [=Kouhiquorogh]	34.546156	69.265251	Girishk, 35 mi downstream	30.906938	64.120788
Doab	34.447689	70.701599	Girishk, 50 km E of	31.583215	65.25238
Egnen af Kabul	34.388779	69.266968	Girishk, 50 km W	32.063956	63.725281
Either	31.716778	64.749784	Girishk, 55 km W	32.105843	63.664856
Eskhsham Wakhan [=Ishkamish], 12 mi E	36.312912	69.652862	Hadda	34.309413	70.391922

Locality	Lat	Long	Locality	Lat	Long
Harad [=Herat?]	34.347971	62.209167	Jalalabad, 3 km SE	34.411442	70.48233
Hari Rud, under Malan Bridge, nr Herat	34.28713	62.191154	Jalalabad, 3 km SSE	34.420505	70.463104
Hassan Guilan [=Hassan Gilan]	32.017392	63.96698	Jalalabad, 30 km SE (by air)	34.2916667	70.4483333
Helmand	31.428663	63.960571	Jalalabad, 30 km SW	34.368378	70.259857
Helmand River, Chah-i-Angir	30.906938	64.120788	Jalalabad, 30 km W	34.434098	70.243378
Herat	34.347971	62.209167	Jalalabad, 35 km SW	34.261757	70.339508
Herat area	34.347971	62.209167	Jalalabad, 35-45 km W	34.400111	70.158234
Herat to Islam Qala	34.452218	61.582947	Jalalabad, 40 km SW	34.311681	70.128021
Herat to Islam Qala	34.452218	61.582947	Jalalabad, 40 km W	34.415973	70.111542
Herat town	34.347971	62.209167	Jalalabad, 45 km W	34.504293	69.957733
Herat, 130 km S	33.26625	62.312622	Jalalabad, 45-15 km W	34.504293	69.957733
Herat, 30-70 km E	34.318487	62.59964	Jalalabad, 8 km ESE	34.377446	70.595169
Herat, 30-70 km NE	34.463542	62.49527	Jalalabad, 80 km E	34.388779	71.042175
Herat, 40 km S	33.856732	62.228851	Jalalabad, bridge across Kabul River	34.469203	70.556202
Herat, 45 km W	34.436363	61.657562	Jalalabad, University ground	34.435231	70.442734
Herat, 72 km S	33.847608	62.236633	Jawzan, Seberghan [Sheberghan]	36.66236	65.748253
Hirat [=Herat], 50 km N	34.876918	62.148743	Juwain	31.723495	61.630096
Imam Sahib, nr. Amu-Darya [Kundus Prov.]	37.457418	65.78247	Juwain [=Lash-e Joveyn], 45 km N of	32.063956	61.822357
Ishkamish, 19 km E	36.142311	69.540253	Kabul	34.53145	69.169464
Islam Qala, 20 km SE	34.577822	61.299362	Kabul at Puli Churkhi suburb, 67 km E	34.5033333	69.8283333
Jalabad, 10 mi W	34.504293	70.158462	Kabul Seh Carte	34.53145	69.169464
Jalalabad	34.435231	70.442734	Kabul Sharinau	34.53145	69.169464
Jalalabad (Spinlar Hotel)	34.4366667	70.4483333	Kabul to Lataband	34.53145	69.169464
Jalalabad to Kaga [=Kazhah]	34.310547	70.390549	Kabul, 10 mi E	34.53145	69.663849
Jalalabad to Nimla [=Memlah]	34.387646	70.265579	Kabul, 15 km SW on rd to Kandahar	34.377446	68.853607
Jalalabad, 10 km E direction to Somarkhel	34.470335	70.544357	Kabul, 20 km NW	34.714525	69.070587
Jalalabad, 10 km ENE	34.470335	70.544357	Kabul, 30 km S	34.161818	69.074936
Jalalabad, 10 km ESE in the direction to Sarsahi	34.470335	70.544357	Kabul, 30 mi E, btwn Kabul & Sarobi	34.513346	69.551239
Jalalabad, 12 km ESE direction to Sarsahi	34.349105	70.567703	Kabul, 35 km S on rd to Kandahar	34.200445	68.804169
Jalalabad, 18 km W by Kabul Rd.	34.4933333	70.3	Kabul, 36 km S on rd to Kandahar	34.198173	68.801422
Jalalabad, 19.2 km N	34.642247	70.444107	Kabul, 40 km SW on rd to Kandahar	34.166363	68.790436
Jalalabad, 2 km SE	34.40691	70.475693	Kabul, 70 km S	33.765449	69.147491
Jalalabad, 20 km ESE	34.283319	70.716019	Kabul, 70-80 km S	33.765449	69.147491
Jalalabad, 20 km SW	34.294665	70.374069	Kabul, 71 km SSW by Kandahar Rd.	34.0516667	68.7483333
Jalalabad, 20 mi. towards Kabul	34.511083	70.174255	Kabul, 80 km S	33.671783	69.216156
Jalalabad, 25 km SE (by air)	34.3983333	70.4666667	Kabul, Chairkana [1740 m]	34.53145	69.169464
Jalalabad, 25 km SW	34.347971	70.204925	Kabul, Koh-el-Tschel Zetun	34.53145	69.169464

Locality	Lat	Long	Locality	Lat	Long
Kabul, Logar Valley, 10km S of Kabul	34.264026	69.1642	Khurd-Kabul [=Khur Kābul] [Kabul prov., 1900 m]	34.386513	69.385128
Kabul, on road to Paghman	34.534844	69.037285	Kilki	33.999996	61.416677
Kamdesht	35.409864	71.338667	Kishm (Keshem), near Dara-i-kur	36.807086	70.106049
Kandahar	31.625321	65.70282	Kotal, Zarni	33.008663	66.091919
Kandahar, 107 km ENE	31.985	66.7316667	Kotal-e-Khair-Khana	34.57291	69.102477
Kandahar, 15 km SSW by Panjuai Rd.	31.5766667	65.5633333	Kotal-e-Unai [=Kōtal-e Ūnay]	34.452643	68.376067
Kandahar, 20 mi SE	31.341909	65.94223	Kotgai [=Kowtgay], nr. Safed-Koh	33.656352	69.73011
Kandahar, 3 km SE	31.6466667	65.765	Kouh-Akhour near Farah	32.430977	62.104797
Kandahar, 30 km S	31.419288	65.917511	Kouh-Bachio [Kouh-Bachtou near Farah]	32.472695	62.187195
Kandahar, 32 km N	31.905541	65.766449	Kundus R. NE Dashi-Doab n. of Kabul	34.852129	69.262848
Kandahar, 35 mi NW	31.896214	66.515808	Kunduz	36.725402	68.860531
Kandahar, 36-56 km N	32.031363	65.684051	Kunduz, 6 1/2 mi SE of, village of Bolla Quchi	36.726778	68.858814
Kandahar, 40 km N	32.031363	65.684051	Kurdakabul Dam	34.386513	69.385128
Kandahar, 40 km SE	31.283245	65.986175	Kurdakabul Dam, 1 mi N	34.386513	69.385128
Kandahar, 40 km W of	31.601931	65.126037	Kurdakabul Dam, 4 mi tw. Buthak [=Butkhak]	34.496654	69.279385
Kandahar, 48 km SE	31.339563	65.955505	Laghman [Laghman Prov., 1000 m]	34.694203	70.147247
Kandahar, 56 km N	32.305706	65.752258	Laman, SE of Qalah [Kal Qal'ah]	32.639375	62.532348
Kandahar, 64 km W	31.662733	64.950256	Lashkar Gar, 50 km SSW	31.165	64.17
Kandahar, 65 km W by Herat Rd.	31.6066667	65.0766667	Lashkar Gar, 50 km SSW	31.165	64.17
Kandahar, 80 km W	31.751525	64.779968	Lashkaragah [Dashtimargo], 40 mi W	31.634676	63.707886
Kandahar, 81 km W by Herat Rd.	31.6716667	64.925	Lashkargah	31.550453	64.329529
Kara Bagh [=Karabagh]	34.939985	61.797638	Lashkargah (Dashtimargo), 10 mi W	31.576196	64.096756
Karam-Kol	34.59906	69.84128	Lashkargah, 12 km S	31.470839	64.332962
Kargha stream, nr Kabul	34.633208	68.926391	Lashkargah, 32 km NW	31.914868	64.099274
Kars	31.571389	65.729722	Lashkargah, 35 km NW	31.998759	64.049835
Kart-e-Tshahar [Kabul Prov., 1800 m]	34.508926	69.140217	Lashkargah, 45-55 km S	30.892797	64.318542
Kash-Rud Valley near Lashi, Dasht-i-Margo	31.674421	62.975922	Lashkargah, 50 km S	31.212801	64.186706
Ker Dahar [= Kandahar]	31.625321	65.70282	Lashkargah30-75 km S	31.010571	64.351501
Ker Dahar or Ken Dahar [= Kandahar]	31.625321	65.70282	Lashkargah, Dashti-margo Desert, 5 mi W	31.577365	64.189568
Khanabad Khenjan, 24 km E	36.744386	69.322128	Lindai-Sin Valley [Nuristan Prov., 2200 m]	34.852129	71.103058
Khanabad, 24 km E	36.744386	69.322128	Logar Valley, 15 km S of Kabul	34.184542	69.158707
Khanabad, 25 km E	36.748788	69.338608	Maimana	35.920127	64.776149
Khandout [=Khandud]	36.930443	72.27042	Maimaneh	35.920127	64.776149
Kharzar	34.284453	63.966293	Marshy area along Logar River, 7-8 mi from Kabul	34.557466	69.526749
Khoast [=Khost]	33.348885	69.92157	Masgid-i-ciovi [= Masjed-e Chubi], Campo 2	34.580083	63.252182
Khost, 30 mi W	33.289212	69.564514	Mazar-i-Sharif	36.721274	67.117767
Khulm, Mazar-i-Sharif [700 m]	36.690446	67.696152	Mazar-i-Sharif, 20 km E	36.791691	67.381439

Locality	Lat	Long	Locality	Lat	Long
Mazar-i-Sharif, 45 km W	36.774092	66.529999	Pari Kham near Darwāz	38.458831	70.877581
Mazar-i-Sharif, 50 km W	36.787291	66.48056	Pashki	35.250105	70.93277
Mazar-i-Sharif, 57-75 km W	36.81808	66.304779	Pass to Dashit-e-Nawar [=Dasht-e-Nawur]	33.555129	67.866554
Mazar-i-Sharif, 65-75 km W	36.81808	66.304779	Pesh Valley [Nuristan Prov.]	35.301677	70.773468
Meiden Khula, about 30 mi ENE of Gardez	33.619194	69.542541	Petsch-Tal [1600 m, Prov. Nuristan]	35.301677	70.773468
Mokuk [=Moqor, Mukur]	32.815844	67.766733	Petsch-Valley, Zunsail [1400 m, Prov. Nuristan]	35.301677	70.773468
Mukur (halfway btwn Kabul & Kandabar)	32.815123	67.766733	Pini Share Valley, 150 mi NE of Kabul	35.603719	70.111084
Mundi Hissar [=Mandi Hissar], south of Kandahar	31.54621	65.858009	Pirzada	31.622252	65.058281
Murghab [=Bala Morgab]	35.576917	63.335266	Pol Khomri [=Pol-e Khomri]	35.953831	68.708096
Murichaq, N Bala Murghab [=Bala Morgab]	35.759886	63.335266	Pul-e-Khumri [1300 m]	35.951052	68.708096
N edge of village of Kara Bagh	34.944488	61.775894	Pul-e-Khumri [Baghlan Prov., 1300 m]	35.951052	68.708096
Narai (NW of)	33.845683	69.637771	Pul-i-Khumri [=Pol-e-Khomri], 25 km NW	36.109034	68.548965
Nawar Pass, 6 km E	33.82023	68.944302	Qala Nau, just N of Ghazni	33.582019	68.417931
NE Dashi-Doab n. of Kabul (Kundus R.)	34.998504	69.218445	Qala-e-Bagaul, 5 km W of Ghazni	33.560851	68.339653
Nemla [=Memlah], near Jalalabad	34.3008	70.1028	Qala-i-Kang, 16 km S	30.965834	61.884384
Nimla [=Memlah], 5-10 mi ENE	34.330962	70.163956	Qalat, 10 mi N	32.261588	66.903763
Noburtscha, on road to Dascht-i-Nawar	33.619194	68.124619	Qalat, 24-50 km N	32.400835	66.821136
nr Paghman River, 10 km SW of Kabul	34.595346	68.952827	Qalat, 24-50 km S	31.854231	66.947479
Nr Tarnak River, 90 km NE of Kandahar	32.115149	66.790466	Qalat, 50 km N	32.495864	66.848602
Nuristan	35.016501	70.393982	Qalat, 50 km S	31.672083	66.939239
Oarya-e-Matun, vic. of Khost	33.348885	69.92157	Qalat-Ghilzai	32.103516	66.90628
Obëh [=Awbeh, Herat Prov.]	34.369866	63.176265	Qizil Qala [Kunduz Prov., 400 m]	37.190476	68.606608
On road to Bala-Murghab [Maimana Prov., 850 m]	35.348736	63.434143	Qualat	32.106134	66.907153
on road to Thor Khama, 8 km ESE of Jalalabad	34.391046	70.534515	Qual'eh Lakou, near the valley of Kabul		
on Tarnak River, 50 km NE of Kandahar	31.872893	66.076355	Quandhor [=Kandahar], 32 km NE	31.711813	66.16745
Orozgon	32.930318	66.139984	Rabatak	34.743869	64.478302
Oubeh	34.372274	63.182616	Rig-Revan near Golbahar, 65 km N of Kabul	35.133808	69.300871
Oukak [?=Okak], Valle de Boum	33.899487	67.954845	road N of Band-e-Amir	34.939985	67.255096
Pagham	34.591318	68.958077	Salang Pass	35.314215	69.037349
Pagham River, 10 km SW of Kabul	34.386513	68.881302	Samangan, 12 km NW	36.039105	67.499771
Paghman, 3 mi N, in Darrahe Pain Stream	34.631372	68.957891	Sang-Hadji [= Sang-e Hajeh]	34.053797	67.565689
Paghman, 4 km above	34.6116667	68.92	Sang-Kotal	34.748383	61.902237
Paghman, 4 km S (by air)	34.545	68.9316667	Sanglakh, 60-80 km W of Kabul	34.572168	68.857956
Pandjab, Decht Ghoudjour [=Panjab]	34.384529	67.013998	Sar-i-Chiasma, nr. Kabul	34.418239	69.178734
Pandjvai [=Panjwai], nr. Kandahar	31.541675	65.457802	Sar-pol [=Sar-e-Pol], 10 km around	36.225442	65.934219
Panjao, Koh-i-Baba	34.391329	67.023067	Sauzak Pass, nr. Herat	34.696461	62.108002
Panjoa [=Panjao, Panjab], 2 km NW	34.410309	67.013111	SE of Zehak	30.830233	61.742933

Locality	Lat	Long	Locality	Lat	Long
Seberghan [=Sheberghan]	36.662911	65.748825	Terra Pass, N of Gardez [Paktia Prov., 2500 m]	33.75289	69.149895
Seistan [=Sistan area near Iran border]	31.415772	61.479263	Tirphul	34.599978	61.266645
Seistan [=Sistan, probably near Faisabad]	31.469668	61.516342	Toward Ghazni, a few km from village of Shash Gao	33.724054	68.515148
Seistan, 50km E of Seranj [= Zaranj]	31.212801	62.280579	Urgun	32.938674	69.183383
Sharisafa, 60 km NE of Kandahar	31.868228	66.438904	Uruzgan [Oruzgan], Kandahar (Naash)	32.926446	66.631712
Shawalikot, Wayan Village [Kandahar Prov.]	31.984783	65.961456	vic. of Chacharan [?=Chagcharan]	34.520914	65.253024
Sheberghan, 30 km NW	36.899391	65.395889	Village of Ghaomi-Faringi, 20 mi S Mukur [=Moqor]	32.502813	67.818146
Shibar Pass	34.902264	68.252206	Wakhan near Sarhad	36.848857	72.286835
Shibar Pass, 20km W.	34.870158	68.076324	Wakhan, Zemestani Baharak	36.848857	72.286835
Shiberghan [=Sheberghan] [Djauz-Djan Prov., 500 m]	36.66539	65.752087	Wama	35.122155	70.740509
Shindand, 30 km SE	33.112249	62.49527	Waziri	33.025217	68.025084
Shindand, 75 km E	33.683211	63.104553	Yabowlang [= Yakawlang] to Band-i Ahair pass	34.800272	67.066669
Shipun	38.068095	70.5023	Yakhan	33.449777	64.295025
Shore-Kaltegai	35.900175	64.482822	Yaktchal [=Yakhchal]	31.78356	64.698558
Sinjui [?=Band-e Sinju]	33.626055	63.712006	Zebak, 102.4 km on road E Faizabad	36.52895	71.34304
Slam Quala [=Islam Qala]	34.660252	61.108088	Zebak, 64 mi by rd E Faizabad	36.52895	71.34304
Somarkhel, about 15 km E Jalalabad	34.369511	70.582809			
Somarkhel, right bank of Kabul River	34.369511	70.582809			
southern side of Kotal-e-Sha-tu [Kotal-e-Shutur]	34.35364	67.024727			
Southern side of Safed-Koh	33.9392	69.7006			
Spin Buldak, 102 km SSE Kandahar (by Quetta Rd.)	31	66.23			
Takhteh Pol, 10 km SSE (by Quetta Rd.)	31.345	65.9416667			
Takhteh Pol, 5 km (by air)	31.3833333	65.8916667			
Tala	34.469769	67.510242			
Taliqan [=Taleqan], 24 km E	36.638672	69.746475			
Taliqan, 30 km E	36.659606	69.791794			
Taliqan, 50 km E	36.747688	69.888611			
Taliqan, 50 km NE	36.805986	69.805527			
Taliqan, 60 km NE	36.778492	69.955215			
Taliqan, 65 km NE	37.015712	70.081329			
Tanatchiv, 165 km N Kandahar	32.934929	66.046142			
Tang-e-Tashaurghan [=Tange-e-Tashqurgan, Khulm]	36.650793	67.698326			
Tarin Ko[w]t, 40 km S	32.263911	65.724792			
Tashkurgan [=Kholm], 15 km W	36.760891	67.565689			
Tashkurgan, 10 km W	36.692649	67.584915			
Tazi, 80 mi N Kandahar	32.230083	67.179995			
Tchachmeh Cher, 17 km N of Pol-Khomri	36.129002	68.688812			

APPENDIX 2

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- constitute a publication; it carries the ISBN no. 91–628–3419–3, and seems to be in a format that indicates distribution. In addition to the introduction, it consists of 6 papers: Rastegar-Pouyani, 1998, 1999, 1999 in press, 1999 submitted, Rastegar-Pouyani and Nilson, 1999 submitted, and Macey *et al.*, 1998. The paper by Rastegar-Pouyani (1999; *Asiatic Herpetological Research*, vol. 8) contains two new taxa, *Trapelus agilis khuzistanensis* Rastegar-Pouyani, 1999 and *Trapelus agilis pakistanensis* Rastegar-Pouyani, 1999.)
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