



The Journal of Threatened Taxa (JoTT) is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/) unless otherwise mentioned. JoTT allows unrestricted use, reproduction, and distribution of articles in any medium by providing adequate credit to the author(s) and the source of publication.

Journal of Threatened Taxa

Building evidence for conservation globally

www.threatenedtaxa.org

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

NOTE

THE EASTERNMOST DISTRIBUTION AND HIGHEST ELEVATION RECORD OF THE RARE DESERT CAT SNAKE *TELESCOPUS RHINOPOMA* (REPTILIA: COLUBRIDAE) IN PAKISTAN

Daniel Jablonski & Rafaqat Masroor

26 January 2019 | Vol. 11 | No. 1 | Pages: 13180–13183

DOI: 10.11609/jott.4650.11.1.13180-13183



For Focus, Scope, Aims, Policies, and Guidelines visit <https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-0>
For Article Submission Guidelines, visit <https://threatenedtaxa.org/index.php/JoTT/about/submissions#onlineSubmissions>
For Policies against Scientific Misconduct, visit <https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-2>
For reprints, contact [<ravi@threatenedtaxa.org>](mailto:ravi@threatenedtaxa.org)

The opinions expressed by the authors do not reflect the views of the Journal of Threatened Taxa, Wildlife Information Liaison Development Society, Zoo Outreach Organization, or any of the partners. The journal, the publisher, the host, and the partners are not responsible for the accuracy of the political boundaries shown in the maps by the authors.

Partner



صندوق محمد بن زايد
للمحافظة على
الكائنات الحية

The Mohamed bin Zayed
Species Conservation Fund

Member



Publisher & Host





ISSN 0974-7907 (Online)
ISSN 0974-7893 (Print)

PLATINUM
OPEN ACCESS



One of the most enigmatic reptile species in the Western Palearctic, the Desert Cat Snake *Telescopus rhinopoma* (Blanford, 1874) is currently known from only a few records from the Middle East (southeastern Iran, with the type locality of the species in Kerman Province), central Asia (southern Turkmenistan), and southern Asia (central Afghanistan and western and northwestern Pakistan). It is a monotypic species biogeographically classified as an Iranian chorotype (Blanford 1876; Wall 1914; Minton 1966; Böhme 1977; Rai 1978; Sindaco et al. 2013).

As is the case for the other members of its genus (currently comprised of 15 species; Mazuch et al. 2018), this species has a triangular head, distinct from the neck with a flat and broad snout. It is the largest species of the genus. The body is cylindrical, moderately slender with a total length of about 160cm (Latifi 1991; Mazuch et al. 2018). It is pale greyish dorsally with a series of large dark brown squarish blotches that fade away from mid-body onward. There is a lateral colour pattern consisting of alternating series of smaller poorly defined spots. The ventral surface is dark brown (Minton 1966; Khan 2006). Due to overlapping morphologic characteristics with *T. fallax* and *T. tessellatus*, *T. rhinopoma* was ranked as a member of the *T. fallax* complex (Böhme 1977; Sindaco et al. 2013).

Telescopus rhinopoma is a nocturnal, oviparous species that was recorded from arid, rocky hills of up to 2,000m in elevation in Iran (Moradi et al. 2013). The record from Afghanistan comes from a locality with an

THE EASTERNMOST DISTRIBUTION AND HIGHEST ELEVATION RECORD OF THE RARE DESERT CAT SNAKE *TELESCOPUS RHINOPOMA* (REPTILIA: COLUBRIDAE) IN PAKISTAN

Daniel Jablonski¹ & Rafaqat Masroor²

¹ Department of Zoology, Comenius University in Bratislava, Ilkovičova 6, Mlynská dolina, Bratislava 84215, Slovakia.

² Pakistan Museum of Natural History, Garden Avenue, Shakarparian, Islamabad 44000, Pakistan.

¹ daniel.jablonski@balcanica.cz (corresponding author),

² rafaqat.masroor78@gmail.com

elevation of approximately 1,050m (Böhme 1977; see Wagner et al. 2016 for the corrected geographic position of the locality). All previously recorded Pakistani localities of the species range up to 1,600m in elevation (Mertens 1969; Table 1), though Khan (2006) documented the species only up to 700m. In summary, we have very little knowledge about the distribution and ecology of *T. rhinopoma* within its known distribution range. Due to the rarity of this species, each new record is important and should be documented in detail to assess the threat status and to determine conservation priorities of the species. The current category for the species according to the IUCN is Data Deficient (Papenfuss et al. 2017).

More than three decades ago, *T. rhinopoma* was known in Pakistan from only five exact localities and one unknown locality situated in Sindh Province (Ingoldby & Procter 1923; Minton 1966; Mertens 1969; Böhme 1977). The easternmost records of this species were from Pakistani Waziristan's federally administered tribal areas

DOI: <https://doi.org/10.11609/jott.4650.11.1.13180-13183> | ZooBank: urn:lsid:zoobank.org:pub:409FCA73-3177-4FC9-9862-79150AD12DF8

Editor: Gernot Vogel, Heidelberg, Germany.

Date of publication: 26 January 2019 (online & print)

Manuscript details: #4650 | Received 22 October 2018 | Final received 21 November 2018 | Finally accepted 27 December 2018

Citation: Jablonski, D. & R. Masroor (2019). The easternmost distribution and highest elevation record of the rare Desert Cat Snake *Telescopus rhinopoma* (Reptilia: Colubridae) in Pakistan. *Journal of Threatened Taxa* 11(1): 13180–13183; <https://doi.org/10.11609/jott.4650.11.1.13180-13183>

Copyright: © Jablonski & Masroor 2019. Creative Commons Attribution 4.0 International License. JoTT allows unrestricted use, reproduction, and distribution of this article in any medium by adequate credit to the author(s) and the source of publication.

Funding: This work was supported by the Slovak Research and Development Agency under the contract no. APVV-15-0147.

Competing interests: The authors declare no competing interests.

Acknowledgements: We thank Khurshid Shah from the Wildlife Conservation Society Pakistan for the images of the individual from Mastuj, the two anonymous reviewers for their suggestions that improved the first version of the manuscript, and Stephen Goldberg who kindly checked and corrected the language.



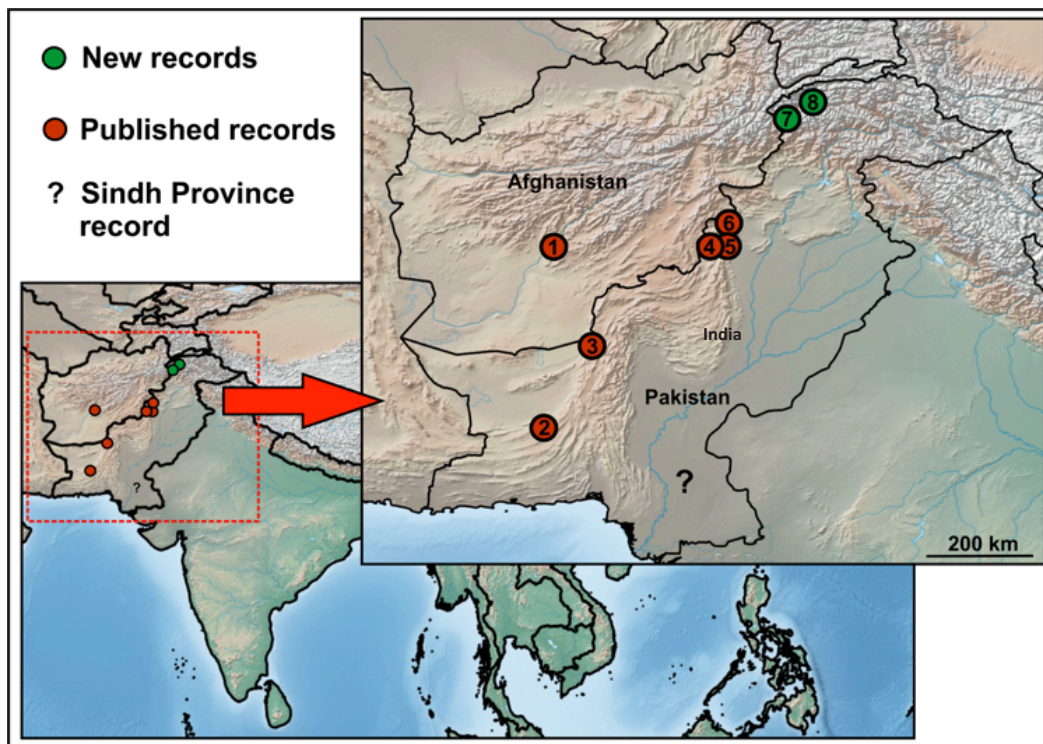


Figure 1. The current distribution records of *Telescopus rhinopoma* from southern Asia (Afghanistan & Pakistan). 1 - Band-e-Kajaki, 2 - Kacha Daman, 3 - Galangur, 4 - Kirgi Bridge, 5 - Jandola, 6 - Miran Shah, 7 - Gahtak, 8 - Kroi Deri, Mastuj. The question mark indicate questionable record of the species from Sindh Province.

Table 1. A summary of distribution records of *Telescopus rhinopoma* from Afghanistan and Pakistan

	Country	Locality	°N	°E	Elevation (m)	Sources
1	Afghanistan	Band-e-Kajaki	32.32	65.24	1,050	Böhme 1977; Wagner et al. 2016
2	Pakistan	Kacha Daman (Thana)	27.36	64.94	1,315	Wall 1914
3	Pakistan	Galangur	29.64	66.34	1,570	Mertens 1969
4	Pakistan	Kirgi Bridge	32.30	69.63	1,320	Ingoldby & Procter 1923; Minton 1966
5	Pakistan	Jandola	32.32	70.13	680	Ingoldby & Procter 1923; Minton 1966
6	Pakistan	Miran Shah (Tochi Valley)	32.97	70.17	754	Smith 1943
7	Pakistan	Gahtak	35.86	71.80	1,823	This study
8	Pakistan	Kroi Deri, Mastuj	36.28	72.47	2,269	This study

(Fig. 1). Here we provide two new records of the species from Chitral District in Khyber Pakhtunkhwa Province, Kunar River Valley, Hindu Kush range, Pakistan. The first record originates from Kroi Deri Village near Mastuj (36.28°N & 72.47°E, 2,269m), where an adult specimen was observed in October 2012. The snake was found injured lying on the main road towards Mastuj, possibly struck by a vehicle (Image 1). The second observation was recorded near the village of Gahtak in November 2016 (35.86°N & 71.80°E, 1,823m). This individual was also an adult but was not photographed. Both records are from

semi-arid, rocky areas (Image 1). These observations were made by a local naturalist, without exact measurements or other recorded data. Both individuals were released and not collected. We compared our new records with the published geo-referenced records of this species from Afghanistan and Pakistan using Google Earth (WGS84). These records expand the known distribution range of the species to more than 400km northeastwards. Moreover, the elevation limit of the occurrence of the species increased overall by 269m, particularly by 699m in the territory of Pakistan.



Image 1. An adult individual of *Telescopus rhinopoma* observed from Kroi Deri, Mastuj, with an overview of its locality.
© Khurshid Shah & Daniel Jablonski

These new records represent an important new range and elevation extension for *T. rhinopoma* in Pakistan and the Hindu Kush range. The new localities are located 350km (Gahtak) and 415km northeast (by air), respectively, from the nearest known locality of Miran Shah in Pakistani Waziristan (Smith 1943). Both new localities are characterised by dry, semi-evergreen deciduous scrub, evergreen oak deodar forests, or subtropical pine forests, habitats that are suitable for the occurrence of *T. rhinopoma* (Khan 2006). From a biogeographical point of view, the presence of *Platyceps*

rhodorachis (Jan, 1865), *Ptyas mucosa* (Linnaeus, 1758), *Spalerosophis diadema* (Schlegel, 1837), or *Naja oxiana* (Eichwald, 1831) in the region suggests a common migration route (the so-called Hindu Kush corridor; Khan 2006) along the Kunar River system from Chitral Valley to Mastuj. These mostly Irano-Turanian species have similar habitat requirements, although not ecologically compatible. The deep valleys of the Hindu Kush, with an arid and rocky character, allow the eastward penetration of reptiles from lower semi-desert foothill regions to the mountain areas. The Kunar River

system was also hypothesized as a potential migration route for *Natrix tessellata* (Laurenti, 1768) in Pakistan (Mebert & Masroor 2013). Further field research is needed to understand whether the lack of data from areas between these localities is due to poor sampling or rather reflects a fragmentary distribution of the species in isolated populations. Genetic analyses that show affiliations of this and other populations of *T. rhinopoma* are also needed.

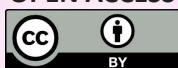
References

- Blanford, W.T. (ed.) (1876). *Eastern Persia: An Account of the Journeys of the Persian Boundary Commission, 1870–1871–1872, Vol. II: The Zoology and Geology*. Macmillan & Co., London, 516pp.
- Böhme, W. (1977). Further specimens of the rare cat snake, *Telescopus rhinopoma* (Blandford, 1874) (Reptilia, Serpentes, Colubridae). *Journal of Herpetology* 11(2): 201–205.
- Ingoldby, C.M. & J.B. Procter (1923). Notes on a collection of Reptilia from Waziristan and the adjoining portion of the N.W. frontier province. *Journal of the Bombay Natural History Society* 29: 127–129.
- Khan, M.S. (2006). *The Amphibians and Reptiles of Pakistan*. Krieger Publishing Company, Malabar, Florida, 311pp.
- Latifi, M. (1991). *The Snakes of Iran - English Edition*. Society for the Study of Amphibians and Reptiles, Oxford, Ohio, USA, 159pp.
- Mazuch, T., J. Šmíd, J., T. Price, P. Frýdlová, A.I. Awale, H.S.A. Elmi & D. Frynta (2018). New records of one of the least known snakes, *Telescopus pulcher* (Squamata: Colubridae) from the Horn of Africa. *Zootaxa* 4462(4): 483–496.
- Mebert, K. & R. Masroor (2013). Dice Snakes in the western Himalayas: discussion of potential expansion routes of *Natrix tessellata* after its rediscovery in Pakistan. *Salamandra* 49(4): 229–233.
- Mertens, R. (1969). Die Amphibien und Reptilien west-Pakistans. *Stuttgarter Beiträge zur Naturkunde aus dem Staatlichen Museum für Naturkunde in Stuttgart* 197: 1–96.
- Minton, S.A. Jr. (1966). A contribution to the herpetology of west Pakistan. *Bulletin of the American Museum of Natural History* 134(2): 27–184.
- Moradi, N., S. Shafiei & M.E. Sehhatiasabet (2013). The snake fauna of Khabr National Park, southeast of Iran. *Iranian Journal of Animal Biosystematics* 9(1): 41–55.
- Papenfuss, T., S. Bafti, N.B. Ananjeva, N.L. Orlov & G. Nilson (2017). *Telescopus rhinopoma*. In: IUCN 2017 Red List of Threatened Species. <https://doi.org/10.2305/IUCN.UK.2017-2.RLTS.T164693A49062553.en> Downloaded on 19 October 2018.
- Rai, M.M. (1978). Une nouvelle récolte de *Telescopus rhinopoma* Blandford, 1874 (Serpentes: Colubridae), une espèce très rare. *Canadian Journal of Zoology* 56: 146–149.
- Sindaco, R., A. Venchi & C. Grieco (2013). *The Reptiles of the Western Palearctic 2. Annotated Checklist and Distributional Atlas of the Snakes of Europe, North Africa, the Middle East and Central Asia, with an Update to the Vol. 1*. Societas Herpetologica Italica, Via Adige, Latina, Italy, 543pp.
- Smith, M.A. (1943). *The Fauna of British India, Ceylon and Burma, including the whole of the Indo-Chinese Sub-Region. Reptilia and Amphibia, 3 (Serpentes)*. Taylor & Francis, London, 583pp.
- Wagner, P., A.M. Bauer, A.E. Leviton, T.M. Wilms & W. Böhm (2016). A checklist of the amphibians and reptiles of Afghanistan exploring herpetodiversity using biodiversity archives. *Proceedings of the Californian Academy of Sciences, Series 4* 63(13): 457–565.
- Wall, F. (1914). A new snake from Baluchistan (*Dipsadomorphus jollyi*). *Journal of the Bombay Natural History Society* 23: 167–168.





PLATINUM
OPEN ACCESS



The Journal of Threatened Taxa (JoTT) is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/) unless otherwise mentioned. JoTT allows unrestricted use, reproduction, and distribution of articles in any medium by providing adequate credit to the author(s) and the source of publication.

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

January 2019 | Vol. 11 | No. 1 | Pages: 13047–13194

Date of Publication: 26 January 2019 (Online & Print)

DOI: 10.11609/jott.2019.11.1.13047-13194

www.threatenedtaxa.org

Articles

Distribution of the threatened Assamese Macaque *Macaca assamensis* (Mammalia: Primates: Cercopithecidae) population in Nepal

– Laxman Khanal, Mukesh Kumar Chalise & Xuelong Jiang, Pp. 13047–13057

Redescription of *Leposternon octostegum* (Duméril, 1851), with an identification key for Brazilian *Leposternon* species, remarks on meristic methodology, and a proposal for pholidosis nomenclature (Squamata: Amphisbaenidae)

– José Duarte de Barros-Filho, Marco Antonio de Freitas, Thais Figueiredo Santos Silva, Mariana Fiuza de Castro Loguercio & Maria Celeste Costa Valverde, Pp. 13058–13086

Communications

Annotated checklist and conservation status of mammals of Fars Province, southern Iran

– Fatah Zarei, Sasan Kafaie & Hamid Reza Esmaeili, Pp. 13087–13113

Functional sperm assessments of African Lion

Panthera leo (Mammalia: Carnivora: Felidae) in field conditions

– Thiesa Butterby Soler Barbosa, Daniel de Souza Ramos Angrimani, Bruno Rogério Rui, João Diego de Agostini Losano, Luana de Cássia Bicudo, Marcel Henrique Blank, Marcilio Nichi & Cristiane Schilbach Pizzutto, Pp. 13114–13119

Description of a new species of *Pseudophilautus* (Amphibia: Rhacophoridae) from southern Sri Lanka

– Sudesh Batuwita, Madura De Silva & Sampath Udugampala, Pp. 13120–13131

Marine snakes of Indian coasts: historical resume, systematic checklist, toxinology, status, and identification key

– S.R. Ganesh, T. Nandhini, V. Deepak Samuel, C.R. Sreeraj, K.R. Abhilash, R. Purvaja & R. Ramesh, Pp. 13132–13150

Short Communications

Feeding trails of Dugong *Dugong dugon* (Müller, 1776) (Mammalia: Sirenia: Dugongidae) in the Gulf of Kachchh, western coast of India

– Deepak Apte, Dishant Parasharya & Bhavik Patel, Pp. 13151–13154

Population status and floral biology of *Trichopus zeylanicus*

ssp. *travancoricus* Burkill ex K. Narayanan (Dioscoreaceae), an important ethnomedicinal plant of the southern Western Ghats, India

– Nambi Sasikala & Raju Ramasubbu, Pp. 13156–13161

Taxonomic notes on *Grosourdia muriculata* (Orchidaceae: Epidendroideae: Vandaeae: Aeridinae), a little known endemic orchid from the Andaman & Nicobar Islands, India

– Sanjay Mishra, C.P. Vivek, Gautam Anuj Ekka & Lal Ji Singh, Pp. 13162–13167

Notes

The importance of trans-boundary conservation of the Asiatic Elephant *Elephas maximus* in Patharia Hills Reserve Forest, northeastern India

– Nazimur Rahman Talukdar, Parthankar Choudhury & Rofik Ahmed Barbhuiya, Pp. 13168–13170

Breeding record of Common Hoopoe *Upupa epops* (Aves: Upupidae) at Satchari National Park in northeastern Bangladesh

– Sabit Hasan, Tanvir Ahmed & Hassan Al-Razi, Pp. 13171–13172

Additional record of the poorly known Argus *Paralasa nepalica* (Paulus, 1983) (Insecta: Lepidoptera: Nymphalidae) in Nepal

– Sanej Prasad Suwal, Krishna Dev Hengaju & Naresh Kusi, Pp. 13173–13174

First report of the catfish Nilgiri Mystus *Hemibagrus punctatus* (Jerdon, 1849) (Bagridae) from Stanley Reservoir, Tamil Nadu, India

– Jayasimhan Praveenraj, Nallathambi Moulitharan & M.P. Goutham-Bharathi, Pp. 13175–13179

The easternmost distribution and highest elevation record of the rare Desert Cat Snake *Telescopus rhinopoma* (Reptilia: Colubridae) in Pakistan

– Daniel Jablonski & Rafaqat Masroor, Pp. 13180–13183

A checklist of spider fauna of Rajasthan, India

– Neisseril Anirudhan Kashmeera & Ambalaparambil Vasu Sudhikumar, Pp. 13184–13187

New records of *Chrysomya putoria* and *C. thanomthini* (Diptera: Calliphoridae) from India, with a revised key to the known Indian species

– Meenakshi Bharti, Pp. 13188–13190

Lectotypification of *Impatiens duclouxii* Hook.f., a new addition to the flora of India from Arunachal Pradesh

– Rajib Gogoi, Umeshkumar L. Tiwari, Souravjyoti Borah & Bladimir Bajur Theodore Tham, Pp. 13191–13194

Partner



صندوق محمد بن زايد
للمحافظة على
الكانات الحية
The Mohamed bin Zayed
SPECIES CONSERVATION FUND

Member



Publisher & Host

