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

Daniel Jablonski & Rafaqat Masroor

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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 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 (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).

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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.

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

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


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