REPTILES & AMPHIBIANS

Additional Locality Records of the Nagarjunasagar Racer, *Platyceps bholanathi* (Colubridae), from Karnataka, India

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The Nagarjunasagar Racer, *Platyceps bholanathi* (Sharma 1976), has been recorded from eight locations in southern India: 1. Nagarjuna Hills, Guntur District, Andhra Pradesh (Sharma 1976); 2. Kapilatheertham, Seshachalam Hills, Andhra Pradesh (Guptha et al. 2012; Joshi 2021); 3. Hyderabad, Nalgonda District, Telanagana (Seetharamaraju and Srinivasulu 2013; Narayana and Sandeep 2021); 4. Thally, Krishnagiri District, Tamil Nadu (Ganesh et al. 2013); 5. Devarakonda, Nalgonda District, Telangana (Ganesh et al. 2013); 6. Bellary Gudda, Bellary District, Karnataka (Sharma et al. 2013); 7. Gingee Hills, Villupuram District, Tamil Nadu (Smart et al. 2014); and 8. Sigur, Nilgiri District, Tamil Nadu (Samson et al. 2017). Herein, we report nine additional records of *P. bholanathi* from five districts in Karnataka, India. Photographic vouchers were deposited in the Illinois Natural History Survey (INHS) Digital Image Collection and the identity of the species was confirmed from photographs by Zeeshan Mirza.

One Nagarjunasagar Racer (INHS 2021e) was recorded at 1100 h on 24 February 2017 in the Nandi Hills, Chikkaballapur District, Karnataka (13.3681°N, 77.6821°E; elev. 1,435 m) by CG. Another (INHS 2021) was found in Kaiwara, Chikkaballapur District, Karnataka (13.3487°N, 78.0021°E) in June 2019 (Akshay Khandekar, pers. comm.), and a third (INHS 2021f) in the Madhugiri Hills, Tumkur District, Karnataka (13.6531°N, 77.2032°E) on 15 August

Fig. 1. A Nagarjunasagar Racer (*Platyceps bholanathi*) (INHS 2021i) from Rayaradoddi, Karnataka, India. Photograph by Yatin Kalki.

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2016 (Harsha Vardhana, pers. comm.). Two snakes were found in Badami, Bagalkot District (15.9266°N, 75.6835°E); one on 31 October 2020 (INHS 2021g) and the other (INHS 2021h) on 15 November 2020, with multiple additional records from the same region on previous occasions (Gowri Varanashi and Arjun Reddy, pers. comm.). We also found four unpublished iNaturalist records: Hampi, Karnataka (2), Salem, Tamil Nadu (1), and Hyderabad, Telangana (1). Finally, we (SL, SP, AC & YK) found another individual (INHS 2021i; Fig. 1) at 1750 h on 28 October 2020 on a rock on top of a granite hill near Rayaradoddi, Bengaluru Urban District, Karnataka (12.7591°N, 77.5184°E; elev. 784 m). After taking photographs and collecting meristic and morphological data, we released it at the site of capture. These records collectively fill gaps in the previously known range of the species (Fig. 2) and bring the total number of confirmed localities for *P. bholanthi* in Karnataka to seven.

The total length of the Rayaradoddi snake was 762 mm and snout-vent length was 571 mm. It had 9 supralabials (5th and 6th touching the eye), 11 infralabials, 1 loreal, 2+3 temporals, 2 preoculars, 2 postoculars, 1 supraocular, 1 internasal, 201 ventrals + 3 preventrals, 108 paired subcaudals, and a divided cloacal scute. This snake differs from the very similar Slender Racer (*P. gracilis*) by having 19:19:15 dorsal scale rows (vs. 21:21:15 rows), 202–212 ventrals (vs. 206–222), and 109–121 subcaudals (vs. 118–127) (Sharma 1976; Seetharamaraju and Srinivasulu 2013).

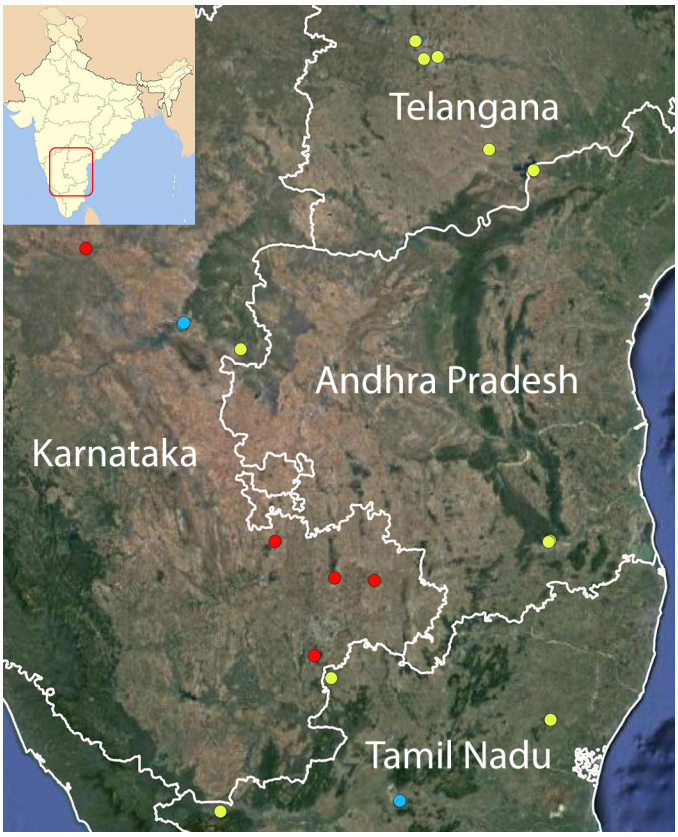

Fig. 2. Map of southern India showing the known localities of the Nagarjunasagar Racer (*Platyceps bholanathi*). Literature records are indicated by yellow dots, iNaturalist records by blue dots, and our new records by red dots.

Platyceps bholanathi appears to be associated with hillocks covered with rocky boulders and thorny scrub vegetation (Deshwal and Becker 2016) and apparently is diurnal, like its congeners. Our new records of this species from four rocky hillocks in Karnataka and a growing recognition of the value provided by these specific habitats as long-term climate refugia for cold-adapted biota (Couper and Hoskin 2008; Shoo et al. 2010; Agarwal et al. 2020) demand further exploration of the biodiversity in these neglected and under-valued ecosystems. Many such hillocks have been destroyed recently due to ongoing mining activities, which threaten those that remain intact. Preserving these habitats and their biota, including the Nagarjunasagar Racer, is important.

Our findings further demonstrate the value of reviewing records of rare and data-deficient species from multiple sources. In this instance, citizen-science records aided significantly in the addition of novel localities to the known range of *P. bholanathi*. Opportunistic reports from rock climbers, hikers, birdwatchers, nature enthusiasts, students, and local residents as well as those on social media platforms are an under-utilized but invaluable source of distribution and behavioral information (Kalki and Weiss 2020) for *P. bholanathi* and other species of snakes (e.g., Deccan Wolfsnake, *Lycodon deccanensis*; Yellow-collared Wolfsnake, *Lycodon flavicollis*; Common Bamboo Viper, *Trimeresurus gramineus*; and Yellow-green Catsnake, *Boiga flaviviridis*) that occupy similar habitats in southern India (Kalki et al. 2020, 2021).

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