



Bilateral anophthalmia in juvenile common Sand Boa (*Eryx conicus*)

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Common Sand Boas (*Eryx conicus*) are stout-bodied, medium-sized snakes with strongly keeled scales (Das, 2002). It varies from its yellowish-white to dark brown colour with irregular blotches of reddish-brown to black forming an uneven chain down the back due to which this snake is often misidentified as baby python by local people. The average length of Common sand boa is 50cm which may reach up to 1m (mostly female) (Whitaker R, 2006). Common sand boa occurs throughout the Indian subcontinent except in the islands of Andaman Nicobar (Whitaker and Captain, 2004). These snakes occupy habitats ranges from sandy soil, rat burrows to brick piles and rocky areas. They are considered as strong burrowers in loose sand or silty soil (Sharma 2007).

In August 2021, we received a snake rescue call from the city of Rajkot, Gujarat, India (22° 15' 30.405" N, 70° 49' 2.7228"

E). Upon examination, it was identified as a juvenile common sand boa (*E.conicus*) and the snake was found dead (Fig. 1). During body examination, it was also observed that this juvenile boa was missing its both the eyes since birth. During the careful investigation, we did not find any evidence of injury and the eye sockets were also absent. To the best of our



Figure. 1. Juvenile Common Sand Boa (*Eryx conicus*)



knowledge, this may be the first report of Bilateral Anophthalmia in Common sand boa in Gujarat, India (Fig. 2-4). As the snake was already dead, we kept it in a nearby natural habitat for decomposition.

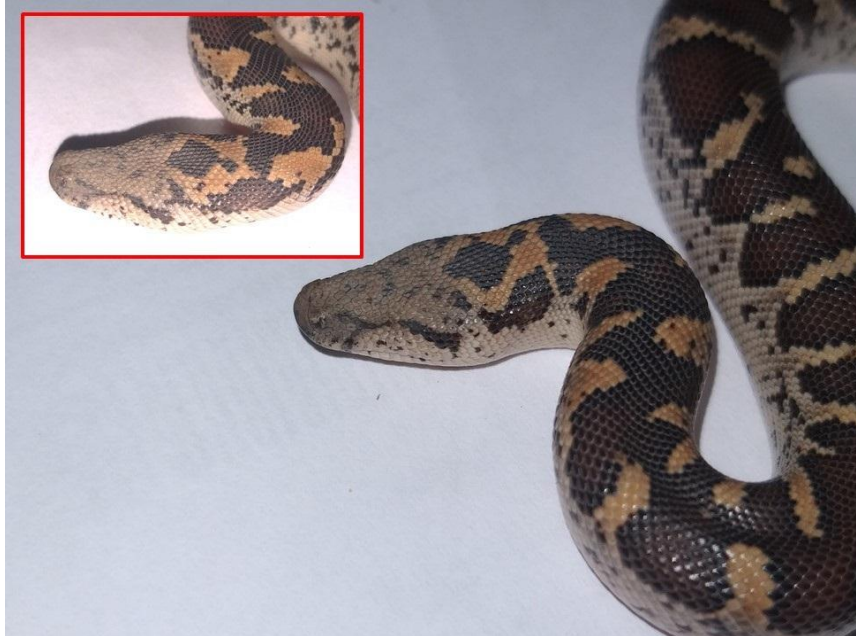


Figure. 2 Bilateral Anophthalmia in Common Sand Boa (Eryx conicus)

Anophthalmia, which can be either unilateral or bilateral, is defined as the congenital total absence of ocular tissue resulting from the failure of the primary vesicle to develop or from a complete regression of the optic vesicle (Millichamp et al. 1983). These deformities have been attributed to infections, exposure to chemicals, UV radiations, mutations, or developmental errors (e.g. Khan and Law, 2005; Bell, Spotila, and Congdon, 2006). Genetic factors may also play an important role in such abnormalities in reptiles (Velo-Antón, Becker, and Cordero-Rivera, 2011). Although, we did not know the reason behind anophthalmia whether it is genetic or environmental.

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Ethical statement by Authors:

The authors hereby confirm that the work described here was carried out under the supervision of the forest department and no any harm to the animal was caused as the work was carried out on the dead specimen found from Rajkot city. All the authors are agree with



the above statement and take full responsibility for any further consequences occur in the future.

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