

AMPHIBIANS OF PURNA WILDLIFE SANCTUARY, DANGS, GUJARAT

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Purna Wildlife Sanctuary is located between 20°51' - 21°21'N and 73°32' - 73°48' E, falling under Dangs District in Gujarat. According to Champion and Seth (1968) vegetation of this Sanctuary could be classified as Moist teak forest (3B/C1b), Southern moist mixed deciduous forest (3B/C2) and bamboo brake (5/E9). Total area of the Sanctuary is 160.84km² with an average rainfall of 1600mm per annum. The terrain is undulating with altitudinal variation from 130-1100m.

Purna Wildlife Sanctuary harbours diverse flora and fauna. However, faunal diversity of this Sanctuary remains poorly understood. Hence, a survey was carried out between 19 June and 9 July 2001. Amphibians encountered were identified in the field. Individuals whose identity could not be confirmed in the field were collected, photographed and were later identified by using standard references (Boulenger, 1890; Taylor, 1961; Daniel, 1975; Daniel & Sekar, 1989; Bhatta, 1998; Pillai & Ravichandran, 1999). Morphometric measurements were taken with the help of a vernier callipers to the nearest 0.1mm. Sex of the museum specimens was determined by dissecting the animal.

In the present study, nine species belonging to four families of Anura and one family of Apoda were recorded (Table 1). Out of these, one species, *Sphaerotheca rufescens* (Jordon, 1854) has not been previously reported from Gujarat. Voucher specimens have been deposited in the Department Museum, Department of Zoology, M.S. University of Baroda, Vadodara 390002. The details of collection, morphometry and field observations of the newly recorded species is given below.

Sphaerotheca rufescens (Jordon, 1854)

Material examined

One female, Bheskatri Range of Purna WLS, Gujarat, coll. M. Siliwal, MSU-AMP-20-1; one female, Bardipada Range of Purna WLS, Gujarat, coll. M. Siliwal, MSU-AMP-20-2.

Measurements

Snout-vent length 34.5-36.5mm; head length 9.0-13.0mm; head width 15.0-16.0mm; tibia length 10.0-12.0mm. Detailed measurements are given in Table 2.

Field observations

MSU-AMP-20-1 was collected at dusk time from a short-grass patch on the hill slopes near Gira fall. MSU-AMP-20-2 was collected from a puddle at 2000hr in Kalibel.

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Table 1. List of amphibians found in Purna Wildlife Sanctuary, Dangs, India

Species	NE	NC	TN	RA	IUCN Status*
<u>Ichthyophiidae</u>					
<i>Ichthyophis bombayensis</i> Taylor 1960	34	4	MSU-AMP-23-1, MSU-AMP-23-2, MSU-AMP-23-3, MSU-AMP-23-4	Common	Critically Endangered
<u>Bufo</u>					
<i>Bufo</i> sp.	2	2	MSU-AMP-21-1, MSU-AMP-21-2	Uncommon	-
<u>Microhylidae</u>					
<i>Ramanella montana</i> (Jerdon 1854)	1	1	MSU-AMP-12-3	Uncommon	Near Threatened
<u>Ranidae</u>					
<i>Hoplobatrachus tigerinus</i> (Daudin 1803)	4	1	MSU-AMP-3-6	Very Common	Least Concern
<i>Fejervariya limnocharis</i> (Boie in: Wiegmann 1835)	3	1	MSU-AMP-2-4	Common	Least Concern
<i>Fejervariya keralensis</i> (Dubois, 1980)	3	1	MSU-AMP-4-3	Common	Least Concern
<i>Tomopterna breviceps</i> (Schneider 1799)	2	1	MSU-AMP-9-2	Uncommon	Least Concern
<i>Sphaerotheca rufescens</i> (Jerdon 1854)	2	2	MSU-AMP-20-1, MSU-AMP-20-2	Uncommon	Least Concern
<u>Rhacophoridae</u>					
<i>Polypedatus maculatus</i> (Gray 1834)	4	1	MSU-AMP-10-4	Very Common	Least Concern

NE - Number of specimen examined; NC - Number of specimen collected; TN - Tag number of collected specimen; RA - Relative abundance; * from C.A.M.P. - G.A.A. (in press).

Table 2. Morphometry of *Sphaerotheca rufescens* (Jerdon, 1854)

Parameters	Specimen 1 (MSU-AMP-20-1) (mm)	Specimen 2 (MSU-AMP-20-2) (mm)
Snout-vent length	36.5	34.5
Head length	13.0	9.0
Head width	16.0	15.0
Length of snout	2.0	2.0
Maximum length of eye	4.5	4.5
Interorbital space	3.0	3.0
Length of arm	15.0	12.0
Tympanum	2.0	2.0
Length of hand	3.5	3.0
1 st finger	3.8	3.5
2 nd finger	5.5	4.8
3 rd finger	4.0	3.0
4 th finger	6.0	5.5
Length of leg	40.0	38.0
Length of tibia	12.0	10.0
Length of foot	6.0	5.0
1 st toe	3.0	3.0
2 nd toe	4.5	4.0
3 rd toe	6.0	5.0
4 th toe	9.5	9.0
5 th toe	4.0	4.0

Tibiotarsal articulation reaches tympanum