



CHECKLIST OF AMPHIBIANS FROM MANDUR AREA, TAL-SHIRALA; DIST-SANGALI

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ABSTRACT:

The present study of amphibian diversity was carried from Mandur village. This village is located in the Shirala tahsil of Sangali district, near to the Zolambi. The total geographic area of this village is 684 hectares. This village enters in the Chandoli National Park. This area is of heavy rainfall. For present study survey of amphibians was carried out during January 2021 to December 2021. The survey is based on intensive search of amphibians on the basis of actual sighting, their calls, turning rocks and their egg clusters (for some species). During survey nine species of amphibians from five families were reported.

Keywords: - Mandur, Amphibians, Diversity, Endemism.

INTRODUCTION :

Amphibians are important components in ecosystems as they constitute the highest portion of vertebrate biomass in these ecosystems (Blaustein et. al., 1994). Amphibians are important animals and act as secondary consumers in food chains in an ecosystem, control insect pests and are admirable bio indicators as they possess high degree of sensitivity to even a small fluctuation in the environment (Lips 1998; Roy 2002; Daniels 2003). Amphibians are a unique group of vertebrates containing about 8100 known species. A 2004 Global Assessment (Baillie et al. 2004) found that nearly 32% of the world's amphibians are threatened, representing 1856 species. The number of extinct and threatened species will probably continue to rise (Stuart et al. 2004). Amphibians play a major role in ecosystem. The adults are secondary consumers in most of the food chain and are biological pest controller. They are biological indicators and very sensitive; can detect the slight change in

environment. According to Cook and Ferguson (1976) severe decline in populations of amphibian have been noted in many parts of the world. In some cases, amphibian decline has been observed in areas totally free from any human interference (Lips, 1998; Mattoon, 2000). In India total 447 amphibian species are present, of which 20 species are critically endangered and 35 species are endangered (Dinesh et al. 2020). Pande and Pathak (2005) and Lavate and Mule (2009) reported five and sixteen species of amphibians Chandoli National Park. Abraham et al. (2013) described several new species and genera of amphibians from the Western Ghats. There are several species are not yet formally described (Bini et al. 2006). Hence the present study was undertaken to fill up the gap between and make a checklist of amphibian fauna from Mandur region. In this village, rainfall is spread over five months from June to October with peaks during July. The average rainfall is spread over five months from June to October with peaks during July. The

study area shows diversity of species as this area has good environmental conditions. The high diversity of habitat is responsible for the amphibian diversity.

MATERIALS AND METHODS:

The present study was carried out in Mandur village, located in Chandoli National Park, Shirala tehsil of Sangali district at 17.1622°N and 73.8939° E. It covers an area about 684 hectares. The survey was conducted from January 2021 to December 2021 from this region. The study of various species of amphibians to be noted either on the basis of actual sighting, presence of egg clutches, by their calls along the streams and through patches of forest during day light and early night hours. The checklist had prepared by using photographic record of amphibian species and with the help of available identification keys (Boulenger, 1890). The information regarding habitat will be collected and studied by actual spot visits in the area, and the standard methods of observation and classification will be followed with the help of existing literature.

RESULTS AND DISCUSSION:

During survey nine amphibian species from five families were reported. Of these; five species are endemic to Western Ghats while, one is near threatened species. The checklist of Amphibian species from Mandur village is given below. (Table No.1)

The study area contains lakes, streams, high rain fall, paddy fields. As this area is the border of Chandoli National Park, it provides high diversity of habitat which is responsible for diversity of amphibian species. It shows that non endemic species are well adapted to this area. The non-endemic species *Euphlyctis cyanophlyctis* and *Fejervarya syhandrensis* are abundant in this area. This is because this village has the good environmental conditions for their habitat. From the study area, out of nine amphibian species four species are non-endemic and five species are endemic to Western Ghats. Hence the survey will provide the baseline information for conservation of amphibian species and biodiversity studies.

Table No. 1: Checklist of Amphibians from Mandur village.

LC: Least concerned, NT: Near threatened

Sr. No.	Name of the Species	Common name	Family	IUCN Status
1.	<i>Duttaphrynus melanostictus</i> (Schneider,1799)	Common Indian toad	Bufoidea	LC
2.	<i>Euphlyctis cyanophlyctis</i> (Schneider,1799)	Indian skittering frog	Dicroglossidae	LC
3.	<i>Fajervarya sahyadrensis</i> (Annandale,1919)	Bombay wart frog	Dicroglossidae	LC
4.	<i>Hoplobatrachus tigrinus</i> (Daudin,1802)	Indian bull frog	Dicroglossidae	LC
5.	<i>Sphaerotheca breviceps</i> (Schneider,1799)	Indian burrowing frog	Dicroglossidae	LC
6.	<i>Clinotarsus curtipes</i> (Jerdon, 1853)	Bicoloured frog	Ranidae	NT
7.	<i>Hydrophylax bahuvistara</i> (Padhye, Jadhav, Modak, Nameer and Dahunukar, 2015)	Fungoid frog	Ranidae	LC
8.	<i>Indirana beddomii</i> (Gunther,1875)	Beddom's leaping frog	Ranixalidae	LC
9.	<i>Polypedates maculates</i> (Gray,1834)	Common Indian tree frog	Rhacophoridae	LC