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A comparative study of two avian communities of Taranga Hill forest and Balaram-Ambaji Wildlife Sanctuary, Gujarat

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ABSTRACT

The avifaunal survey was carried out to highlight the importance of the study areas as well adapted and the most favourable habitat for bird populations. A total of 123 species of birds belonging to 13 orders, 43 families and 92 genera were recorded, of which 4.88% were abundant, 18.70% were common and 13.01% were rare in occurrence. A total of 101 residents, 9 residents and migratory and 13 migratory accounted for the diversity of avifauna of these regions. The avifauna was more dominant in Balaram-Ambaji Wildlife Sanctuary as compared to Taranga Hilly-forest. Perhaps, it could be due to more agricultural croplands, undisturbed banks of Balaram and Saraswati rivers, dense forest, high trees, water bodies and scattered patches of human settlements in village vicinities, natural forest areas which provided shelter to more birds.

Key words : Avian community, Avifauna, Hilly-forest, Biodiversity, Wetland, Water bodies.

India ranks 6th in biodiversity and that is a prideful talk, yet due to human interference in various aspects and habitat destruction there is decrease in few species, which is a topic to worry. Keeping this idea centrally, positive steps should be taken first on investigating small habitats. This type of small attempts which provides various results and its comprehensive study shows new rays towards natural conservation, than after proper planning should be done. Keeping these views in mind mainly the avifauna of North Gujarat in selected forest areas are scinarionised.

In Gujarat, very few attempts have been made to study the biodiversity. Acharya (2003) and Vyas (2005) have also investigated the avifauna of wetland and urban areas of Visnagar, respectively. So far, any type of systematic probing into these forests of North Gujarat has not been made. Hence, it is very essential to collect some sufficient documentation regarding the distribution and status of birds in these areas. The present study comprises a survey of avifauna of Taranga Hill forest and Balaram-Ambaji Wildlife Sanctuary, which will be useful in providing baseline data for planning effective management to study bird diversity in their respective habitats. This paper presents the systematic list of birds with their orders and families.

Study area :

Taranga Hill forest (THf):

The Taranga Hill forest is situated at 72° 46' E and 24° 00' N in the North Gujarat region, India (Fig.1) and at elevated 365.76 meters above. It is located 56 km away

from the terminus railway station of Mehsana-Taranga Hill meter gauge railway line. The Sabarmati River passes through at the Western end of the forest, which is about 4.5 km away from it. Gujarat State Forest Department considers this forest as an unclassified (Under Section-IV) of Satalasana taluka reserve forest of the Mehsana district of North Gujarat. It is included under Division & Circle of Gandhinagar. The authority of this forest is under the Timba village Gram-Panchayat, which is very nearest village to this forest. Total forest area of Mehsana district is 48.28 sq km out of this, the Taranga forest covers 18.12 sq km, which is the largest study area for the present work. It is one of the protected natural habitats for leopard, wolf, bear, fox and other animals.

The climate is semiarid with irregular rainfall. Average temperature remains 32.10°C to 21.98°C. Temperature is high in May and low in December and January. Total rainfall remains 591.25 mm with 153 rainy days. Xerophytes vegetation is dominant. Agro-ecosystems exist at the peripheral areas of the forest.

Balaram-Ambaji Wildlife Sanctuary (BAWS):

Balaram-ambaji wild life sanctuary (BAWS) is a dense patch of forest in Gujarat. The sanctuary derives its name from two historical temples Balaram and Ambaji. It is declared as a sanctuary on 7th August 1989 by Government of Gujarat, vide its notification No. GVN/27/WLP/1088/850-V2. It lies between 24° 10' to 24° 30' N and 72° 20' to 73° 00' E. The total area of this sanctuary is 542.08 sq km.