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THE HABITAT PREFERENCE AND SIGHTING OF THE VULNERABLE BIRD YELLOW-THROATED BULBUL (PYCNONOTUS XANTHOLAEMUS) IN POLLACHI RANGE OF ANAMALAI TIGER RESERVE, TAMIL NADU, WESTERN GHATS

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Abstract: Anamalai Tiger Reserve is a haven for bird diversity and an intensive study has not been carried out in the recent past. A revisiting of the distribution of Yellow-throated bulbul was conducted in Pollachi Division of Anamalai Tiger Reserve and the data shows that species considered Vulnerable by IUCN are surviving in the locations described in the earlier reports. Further, the distribution of the species is recorded in three additional places and its habitat preference is described. *IndexTerms* - Yellow-throated Bulbul, Bird Diversity, Distribution, Anamalai Tiger Reserve.

I. INTRODUCTION

Anamalai Tiger Reserve is located in the South of the Palakkad gap in the Southern Western Ghats. Geographically it is located between the longitudes 76° 49.3' N and 77° 21.4' E and latitudes 10°13.2' and 10° 33.3' N. The Tiger Reserve falls in Coimbatore, Tiruppur District and Dindigul districts in the State of TamilNadu. The paper is a part of a larger study in Pollachi Division of Anamalai Tiger Reserve.

I. RESEARCH METHODOLOGY

The line transects, road transects and point counts were conducted in many parts of the tiger reserve to study the bird diversity and altitudinal distribution of birds in Pollachi division of Anamalai Tiger Reserve. The species Yellow-throated Bulbul (*Pycnonotus xantholaemus*) was observed in new localities and its habitat preference and sighting of the species is briefed.

Data Collection

The Yellow-throated Bulbul (*Pycnonotus xantholaemus*) is uncommon and patchily distributed in South India (Grimmett *et al.* 1998, Ali and Ripley 1971). The species is classified as Near Threatened due to its habitat disturbances and its feeding habits. It is chiefly frugivorous but also hunts lizards, spiders and small insects.

In the Anamalai Hills, the Yellow-throated Bulbul was reported by Kannan *et. al.* in 1992, 1998, and 2001 on the Pollachi-Valparai road, just above Aliyar Dam. Yellow-throated Bulbul has been reported by Whistler and Kinnear (1932; also cited in Ali and Ripley 1971) and Ali also mentions a record of Yellow-throated Bulbul in 1886 in the Anamalai Hills by W. Davison.

Recent surveys of 18 sites found that the species had disappeared from six historical locations. Habitat loss is occurring throughout its fragmented range, suggesting that there is a decline in population, although habitat in south India is largely intact and in some areas, vegetation on hills is recovering (S. Subramanya 2016). It is thought to have been significantly more abundant in the past, particularly in the Western Ghats (Subramanya et al. 2006).

The favoured habitat of the Yellow-throated Bulbul is hill scrub and deciduous forests (Ali, 1942) and cites that the Yellow-throated Bulbul can be seen on the drier eastern slopes of the Anamalai Hills (Beisenherz, 2004). No sighting records have been documented after the studies conducted in 2004. Therefore, during the study of bird communities in the Anamalai Tiger Reserve, the occurrence of the species was recorded in new places and the habitat features were also recorded.

No	Forest Type	Range	Beat	Latitude	Longitude	Altitude	Species	Activity
1	Dry Deciduous	Pollachi	Paruthiyur	10.461488°	077.064634°	437	Ficus amplissima	Foraging – hunting insects
2	Dry Deciduous	Pollachi	Aliyar	10.456302°	076.979221°	434	Ficus microcarpa	Foraging
3	Dry Deciduous	Pollachi	Villonie	10.450760°	076.983983°	773	Ficus microcarpa	Foraging and flying
4.	Dry Deciduous	Pollachi	Mangarai	10.468918°	076.938014°	446	Ficus microcarpa, Ficus religiosa	Foraging

Table1: Table showing the locations where Yellow-throated bulbul was sighted and their habitat preference

Habitat and conservation significance of Yellow-throated Bulbul near Contour canal:

The contour canal supplies water from the Parambikulam Dam, present on the western side of Anamalais in Kerala. The contour canal is about 48 kms long and has many tunnels through which the water from Parambikulam reservoir is taken to the eastern part of Anamalai Tiger Reserve for irrigation and drinking water. The contour canal although acts as a barrier for many herbivore and carnivore species, the contour canal with vertical rocky cuts and escarpments make an ideal place for ficus species to frow and supports its associated bird species. The species like *Ficus retusa, Ficus anamalayana, Ficus glomerata, Ficus benghalense, Ficus religiosa, Ficus and Ficus and Ficus microcarpa* trees are present near the contour canal. The varied ficus species, *Grewia* species, *Ixora, Securigena leucopyros, Zizyphus oenoplia,* along with many deciduous trees like *Gyrocarpus, Moringa, Tamarindus, Mallotus, Anogeissus, Commiphora, Streculia, Albizzia amara,* forms a good habitat for a variety of bird species. The vertical rocky walls or cuts made from making the contour canal act as a safer place for the nesting birds and the presence of roots on the rocks provide the best roosting place for birds and even for some lesser mammals like common palm civet.

A review of literature shows that the species was sighted in two places above the Aliyar reservoir and one of the locations described is the same (Kannan, 1992, Beisenherz, 2004). But in this study, three new locations have been identified and the distance between the three places was found to be more than 14.5 kilometres and the altitude range was between 434 to 773.

Although the sighting of Yellow-throated bulbul was always uncommon and rare, it was sighted in March 2021 and in August 2021 on the eastern slopes of the Anamalai Hills. Two birds were sighted near the "Contour Canal" of Parambikulam Aliyar Project sites in three locations. One in Aliyar beat another in Mangarai beat and the third in Paruthiyur beat. The contour canal which is located at about 435 to 450 meters asl, forms a barrier for most of the large animals such as elephants, tigers, leopards and other arboreal mammals. But, the birds use the habitat effectively since Ficus species fruit throughout the year and all frugivorous birds have a strong relationship with these trees. The *Ficus microcarpa* tree was present near the 9th bend, and two birds were seen foraging and chasing each other at an altitude of 773m asl.

In the same area, four co-generic species of bulbuls were found; the Red-whiskered Bulbul *Pycnonotus jocosus*, the Red-vented Bulbul *P.cafer*, the White-browed Bulbul *P.luteolus* and the Grey-headed bulbul *Brachypodius priocephalus*. The Grey-headed Bulbul had the lowest relative abundance of all the bulbul species.

RESULTS AND DISCUSSION

The contour canal is considered an infrastructural development and was considered a hindrance to larger herbivores and carnivore species and many wildlife. However, the contour canal provides the required habitat and preferred foraging trees along its rocky cliffs inaccessible to many animal species. It aids in the conservation of the lesser known restricted-range bird species like Yellow-throated bulbul by providing the necessary habitat that is considered a boon for preserving the species.

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