



A Note On Breeding Behavior of Asian Blue Throated Barbet – *Psilopogon asiaticus asiaticus* (Latham, 1790)

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ARTICLE INFO

Received: 07.07.2022

Revised: 28.11.2022

Accepted: 29.11.2022

Key Words: Asian, Barbet, Breeding, Sexual Dimorphism.

ABSTRACT

Present study has been conducted from November, 2019 to July, 2021 on the breeding behavior of Asian Blue Throated Barbet in Paschim Medinipur District of West Bengal. Study reveals that the breeding season of Asian barbet starts from November through the selection of suitable and safe plant for nesting. Male and female both visited frequently to select a suitable place on tree. Preferably they choose a dead branch of soft wooded tree like Gamhar (*Gmelina arborea* Roxb.) in present study. The couple spent about three month to select and excavate a hole on dead branch of the tree. During the study it has been found that the breeding season ends on July by completing two consecutive breeding cycle of a single couple. Present study also depicts the sexual dimorphic characters of the bird species having a “V” shaped plumage on the back (dorsal side) of male one which is absent in female. So, present study is the addition of new dimension to the breeding behavior and diagnosis of sexual dimorphism of the bird under study in South Bengal.

Introduction

Asian Blue Throated Barbet is native to Bangladesh, Bhutan, China, India, Laos, Myanmar, Nepal, Pakistan, Thailand and Vietnam (Birdlife International IUCN Red list). In India it is common in Himalyan Range upto 6000 ft from Chamba to East Assam and also in West Bengal up to Kolkata (Salim Ali, 2003). Barbets are calm and charming birds, shy in nature, good agents for seed dispersal in the forest. Their colour combination and calling attracts visitors in woody forest and

national parks. This bird is medium sized and 6-9 inches long, including the tail, and weighs between 78-103grams (Avian web <https://www.beautyofbirds.com>). It has a big head and a short tail in comparison to its body size. They have bright green plumage and crimson-red colour in the crown, divided in two parts frontal and temporal separated by green patch including black band around the crown with blue throat. A large crimson-red spot on either side of neck, visible during calling and small red spot on either side of base of mandible is

the diagnostic characters. Its beak is cream-white with black spots and surrounded by strong black bristles. Males and Females look alike and younger ones have duller plumage (Salim Ali, 2003; Avian Web, <https://www.beautyofbirds.com>).

Present study is highlighting the morphological difference between male and female couple and the variation of breeding season of *Psilopogon asiaticus asiaticus* (Latham, 1790) in South Bengal. The book of Indian Birds by Salim Ali (2003) and Avian web mentioned that male and female look alike and their breeding season is lasting from March to Jun. Therefore, the study noted the extension of breeding season and distinct dimorphism is being the added feature to the biology of the species.

Materials and Methods

Present study is the observation on breeding behaviour of *Psilopogon asiaticus asiaticus* (Latham, 1790) in Paschim Medinipur District of West Bengal (21° 45' - 22° 57'N; 87° 03' - 87° 53'E). Photograph of different activities during breeding season of the bird has been taken time to time. Distinct photographic feature has been taken to show the morphological difference between male and female birds. Identification of bird has been done according to diagnosis given by Salim Ali (2003) and Avian Web (<https://www.beautyofbirds.com>).

Result and Discussion

According to avian web and Salim Ali, male

and female looks alike; but during present study, a keen observation has been made on different activities related to nesting, incubating (Fig. x & y), nursing babies through feeding and cleaning nest, it has been concluded that the female is more concerned to the care of baby. Simultaneously, morphological characters also noticed that the male is somehow larger body size in comparison to the female partner. Male also possess a distinct "V" shaped plumage, outside is bordered by black line on the green back as shown in figure 1 & 2. Frequency of feeding to the babies by female is noticed much more than the male. Cleaning of nest is done by female only, it was observed that the female brings barriers, insects etc., for her babies and in the same visit it took some wastes from the nest (Fig.3) and flew away to dump the wastes in a distance place.

Regarding reproductive strategies and breeding season, it has been observed that the bird species completes two cycles of breeding in a single breeding season, figure 4 is the baby bird of first cycle reproduction (photograph taken on 28.05.2020) and figure 5 is the baby bird of second cycle of reproduction (photograph taken on 19.07.2020). There is a gap of about 20 days in between two reproductive cycles. In relation to the reproductive season, it has been reported by several researchers (Yahya, H.S.A., 1987, 1989 & 2000 and Rasmussen, P. C. & J. C. Anderson, 2005) that the breeding season of

the bird under study starts in March and ends in June. During present study author observed that the bird starts pre-breeding preparation from end of November through site selection and actual excavation on tree trunk starts in beginning of March (Fig. 6& 7 taken on 05.03.2020 and 16.03.2020) and lasts up to end of July (Fig.8, photograph taken on 19.07.2020). Therefore, present results is the

addition of knowledge regarding the biology of *Psilopogon asiaticus asiaticus*(Latham, 1790), studied in Paschim Medinipur District of West Bengal, India.

Acknowledgements

Author expresses their gratitude to the bird, *Psilopogon asiaticus asiaticus* (Latham, 1790) for selecting the Grmhara tree of first author's home garden, located just behind window (5 ft distance) of dining room for which study become easy.



Fig. 1: Female bird



Fig. 2: Male bird



Fig. 3: Female cleaning waste



Fig. 4: First cycle baby (lower one) with mother on 28.05.2020



Fig. 5: Second cycle baby still in nest on 19.07.2020



Fig. 6: Making hole on tree trunk on 05.03.2020



Fig. 7: Almost completed making hole on
16.03.2020



Fig. 8: Male and Female both feeding babies on 19.07.2020



Fig. x: First cycle incubating bird on 10.04.2020



Fig. y: First cycle incubating bird on 15.04.2020

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