



NESTING BEHAVIOR OF PAINTED STORK (*MYCTERIA LEUCOCEPHALA*) AT NAVSARI RAILWAY STATION, NAVSARI DISTRICT, GUJARAT

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ABSTRACT

The Painted stork is long legged wader bird belonging to Ciconiidae family. Study was carried out on nesting behavior of painted stork (*Mycteria Leucocephala*) at Navsari Railway Station, Navsari district, Gujarat, India from January 2016 to December 2016. Painted stork visited this site every year during breeding season only so they are called Residential migratory birds and this species fall into Near Threatened category according to IUCN status. Total 24-26 nests were observed during the study. Both male and female performed equal duty during nest construction and to feed young ones. Incubation period was noted about 29 – 34 days and fledging period was recorded up to two months after hatching. Though there were varieties of anthropogenic activities at the study site, but still this was best breeding site for Painted stork. So it is necessary to take steps towards the conservation of such diversified habitat.

KEYWORDS : Wader, Painted Stork, Nesting Behavior, Residential migratory

INTRODUCTION:

The Painted stork is a long legged large wader bird having long neck and heavy yellow bill (Ali & Ripley, 2002). This species belongs to Ciconiidae family having an IUCN status as Near Threatened. It is distributed throughout the plains of Indian Union, both Pakistan, Nepal, Ceylon but not recorded in the Andaman Island (Ali & Ripley, 1983). This species generally considered as Residential Migrant in response to the environmental condition. During the breeding season, they show local migration and select appropriate breeding site near the water bodies. Painted stork has colonial nesting pattern and construct platform stick nest.

In India, breeding biology of the painted stork has been carried out in different parts. Desai in 1971 studied feeding ecology and nesting of painted stork, Bhat et al (1990) stated information on a breeding colony of painted stork, Devkar et al (2006) provided a work on captive breeding of Eurasian Spoonbill and Painted stork, Urfi et al (2007) studied nesting ecology of painted stork etc. but the work on the nesting behavior of this species in South Gujarat specially with Surat and Navsari district is scanty. Thus to collect the baseline data on nesting of Painted Stork at Navsari Railway Station, the present work is carried out which will be helpful to take steps towards the conservation of such diversified nesting site with different tree species.

MATERIAL & METHODS:

The nesting behavior of the Painted Stork (*Mycteria leucocephala*), was conducted at Navsari Railway Station in Navsari district of Gujarat, India from January 2016 to December 2016. The site is located at 20°56'41.6"N latitude and 72°54'50.7"E longitude and 14m above the sea level. Average approx. rainfall of the district was 1250mm. Average maximum and minimum temperature in the district was 32° and 20° respectively.

Surveys were conducted to locate the nesting and breeding site of Painted Stork. The site was visited weekly throughout the year for monitoring the nesting behavior. Observations were done using 10-30x 70mm binocular while photographic recordings were taken with the aid of Sony ILCA - 77M II camera fitted with 70-300 mm zoom lens.

RESULTS & DISCUSSION:

Painted storks are colonial breeders. Most colonies are located near water bodies on large and bushy trees in villages and agriculture fields (Urfi, 1993a). In Navsari, nesting colony of painted stork found near the human settlement on Navsari railway station. Navsari railway station has variety of

anthropogenic disturbances like vehicle noise pollution, urbanization, Human interferences etc. One other remarkable feature of this nesting site is that there is holy temple just under the nesting tree which has continuous human movements. Many other researchers also noted that painted stork are known to have a strong loyalty to their breeding sites and preferred trees where there is human disturbance (Ramesh and Gundala, 2015).

The painted stork arrived at this site in month of July & August 2016. In the second week of August the nesting construction activity was recorded. The painted stork selected Banyan trees (*Ficus benghalensis*) as nesting trees. Mostly nests were located in higher canopy of nesting tree. The main factor affecting the nesting site selection was food availability. Both male and female participated in nesting behavior. Fragments of old branches of trees and green leaves of trees were used as nesting materials. The twigs were used to form main platform of nest and leaves were used to lined and soften the nest. Nests were large with a central depression internally. It was also observed that the green foliage of nesting trees turns to white due to fecal matters but it all recovered and turns green once the nests were empty. Once the site is selected for nesting the one bird continue guarded the nest in absence of other bird. The nest construction activity was completed in first week of September.

Total 24 – 26 nests were recorded in the study area. Mating and egg laying was observed in month of September. Generally, egg clutch size in this bird was <4 eggs. After laying egg, both sexes incubated eggs one after another. Incubation period was about 29 – 34 days and it reached up to the second last week of October. In painted stork, both the parents showed parental care to feed young ones. It was observed that in the last week of December and early days of January, all the juveniles leaved the nests along with their parents. This site is visited by Painted stork during their breeding season only so painted storks are considered as Residential migratory bird in South Gujarat.

CONCLUSION:

It can be concluded that Navsari Railway station is one of the best breeding site for such Near Threatened avifauna. Awareness about this species should be created among local people and efforts should take for the protection of nesting colonies of such birds. This will enhance the breeding population of the Painted Stork.

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