

Research Paper

Biology

Study of Nesting Behaviour of Painted Stork (Mycteria Leucocephala) in Takali (Padmawati)Lake In Pandharpur City (M.s.) India

Shilpa	Research centre,Department of, K.B.P.Mahavidyalaya,Pandharpur
KumarPawar	Dist.Solapur (M.S.)
Dr. P.S. Salunkhe	Research centre, Department of , K.B.P.Mahavidyalaya, Pandharpur

ABSTRACT

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 Dist.Solapur (M.S.)

 Presnt paper deals with the study of nesting behaviuor of painted stork, Mycteria leucocephala in Takali (Padmawati) lake in Pandharpur city. The study was carried out during November 2013 to July 2014 according to Ali and Ripley (1983).

Takali lake provides a good breeding and feeding ground to a variety of aquatic avifauna and its one of the best site to carry out studies on various aspects of aquatic avifauna.Painted storks visit this lake every year for their nesting.This bird is included in the IUCN Red List of Threatened Species. During the study period total 90 nests were observed in the lake. All the nests were built on the low level Acacia trees within the lake water.The nest construction, mating and egg laying is observed in the month of November and December.The nestlings were observed in almost all the nests in the month of February to April.Both male and female carried out the duties of incubation,feeding to nestlings and other parental cares.The incubation period recorded is about 32 to 35 days.Generally in the month of May and June all the juveniles leave the nests along with their parents.Takali lake is one of the best nesting, feeding and breeding site for the painted storks.So it is neccessary to take steps towards the conservation of such diversified wetland.

KEYWORDS :Painted storks, Nesting, Takali lake, Pandharpur city.

INTRODUCTION

The painted stork is a long legged, long necked, marsh bird with long heavy yellow bill (Ali and Ripley, 1983). It is one of best known species of aquatic avifauna. It is a resident bird but migrate locally in response to the environmental conditions. They nest colonially and construct platform stick nests. Painted stork (*Mycteria leucocephala*) is included in IUCN Red List of Threatened species. It is distributed throughout the plains of the Indian Union, both Pakistan, Nepal, Ceylon but not recorded in the Andman Island (Ali and Ripley, 1983).

Work on nesting ecology, reproductive patterns, breeding biology of the painted storks has been carried out in the different parts of the India. Desai (1971) studied feeding ecology and nesting of painted stork, *Ibis leucocephala*, Desai *et.al.* (1977) studied reproductive patterns of the painted stork, Bhat *et.al.* (1990) provided information on a breeding colony of a painted stork, Devkar *et.al.* (2006) worked on captive breeding of painted storks and Eurasian spoonbill, Urfi *et.al.* (2007) studied nesting ecology of the painted stork etc.,but the work on the nesting behavior of this bird in Takali lake, Pandharpur is scanty. A review of literature reveals that a literature on nesting of painted stork in Takali (Padmawati) lake of Pandharpur city is not available. Therefore to collect baseline data on nesting of painted stork in Takali lake the present work is carried out which will be helpful to study the nesting ecology of painted stork and to take steps towards the conservation of such diversified nesting site.

MATERIALS AND METHODS

The study was conducted at Takali (Padmawati) lake in Pandharpur city, a famous holy place for God Vithala, situated on the bank of Bhima river. It is on 17°40'N latitude and 75°23'E longitude and at 465.12m above mean sea level. Takali lake is situated at south side of the city. Average rainfall of the city is 573cm.Average maximum and minimum temperatures in the city are 19° c and 41°c respectively.

Takali lake provides a good breeding and feeding ground to a variety of local and migratory birds. During study period nesting of various other wetland birds such as coots, cormorants, purple moorhen is also observed. The rich vegetation around the lake and Acacia trees within the water provide natural site for the nesting.

The lake was surveyed weekly for the period of nine months from November 2013 to July 2014. The observations were carried out by Nikon binocular (10x50) according to Ali and Ripley(1983).

RESULTS AND DISCUSSION

The recorded arrival month of the painted stork is November and

December 2013. In the last week of the December we observed nest construction activity. For nest building they collected twigs, sticks, branches of different trees surrounding the lake. All the nests were built on the low level Acacia trees within the lake. Nests are large with a central depression internally lined with leaves and straws.

In the second week of the January 2014 nest construction was completed and total 55 nests were recorded in the study area .Mating and egg laying is observed in the month of January and February. Generally female lays two to three eggs. The average incubation period recorded is about 30-35 days. Both male and female incubate the eggs and by the end of February nestlings were observed in almost all the nests. Both male and female carried out the duties of incubation, feeding to the young ones and other parental cares. Generally in the month of May and June all the juvenile leave the nests along with their parents. Painted storks visit the Takali lake during nesting season only.

Painted storks visit the Takali lake during nesting season only. Same results were obtained in Keolodeo Ghana National Park Bharatpur (Ali and Vijayan,1983) and Delhi Zoo (Urfi, 1997). Desai *et.al.* (1977) recorded incubation period of 32 days. While nesting birds usually give preference to the safe nesting area, availability of the nesting material and plenty food for nestilngs. All these conditions are favorable in Takali lake hence every year number of painted storks fly to the Takali lake during nesting season for safe breeding.

CONCLUSION

Based on the study we have concluded that, Takali lake is one of the best breeding site for such Near Threatened bird species. Awareness about this ecologically important species should be created among local people and efforts should be taken for the protection of nesting colonies. Monitoring the study site will also help to study the breeding biology and nesting ecology of the painted storks in the Takali lake.

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