

RESEARCH PAPER

First record on breeding chronology of little cormorant, *Phalacrocorax niger* in Visnagar, north Gujarat

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ABSTRACT

The breeding chronology of the little cormorant, *Phalacrocorax niger* was studied in Dosabhai garden at Visnagar, Gujarat in year 2009. The breeding activities of the little cormorant commenced in June and continued until October. It was found that the birds built their nests on *Eucalyptus globules* tree. Both partners took part in nest building. The nest-building period was 10 to 14 days and the clutch size varied from 3 to 6. The incubation period was from 16 to 20 days. The young flew away from the nest at the age of 18 to 26 days after hatching.

Key words : Breeding season, Clutch size, Hatching, Incubation, Brooding, *Phalacrocorax niger*

The little cormorant, *Phalacrocorax niger* is a member of the cormorant family. It breeds in tropical south Asia from southern Pakistan through India and Sri Lanka east to Indonesia. It is resident but undertakes some limited seasonal movements. Originally described by French ornithologist, Louis Jean Pierre Vieillot in 1817, this is a common and widespread bird species. It breeds near freshwater wetlands and builds nest on a tree. Little cormorant is mainly glossy black in the breeding season, with white head plumes similar. Although the natural history of little cormorant, *Phalacrocorax niger* is well known through a large number of anecdotal reports (Jerdon, 1862; Whistler, 1949; Wallace, 1971; Ali, 1977; Barnes, 1981; Welty and Baptista, 1988; Perrins, 1990) but very few research works on the breeding biology of the species exist (Siriwannichkul, 1981). However, it was first record in Visnagar area, it is imperative to study breeding chronology. Though cormorants, as a group, are well studied, little cormorant has received scant attention from bird biologists. In an attempt to fill this information gap, this study was conducted to understand the breeding biology of the little cormorant in Visnagar.

Study area :

For the study of breeding chronology of little cormorant, *Phalacrocorax niger* Dosabhai baug, Visnagar was selected. Visnagar (23°42' N and 71°34' E above 127 m.s.l.) is a taluka place of Mehsana district, Gujarat state, India. It is surrounded by wetland and cropland ecosystem.

MATERIALS AND METHODS

For the study of breeding chronology, we applied direct observation method. As the little cormorant is known

a colonial breeder, only six nests from nesting trees were examined to observe clutch size, incubation period, brooding, fledgling period etc. To make a study, Visnagar city was selected. The site was the spaces, where species were building the nest. The nest was given particular code number and was constantly observed for the completely breeding season. The nest in which the first egg was laid, the egg was given a number and thus the clutch size was fixed. Due to constant observation, it was possible to notice the incubation period and nesting period. Some nests, which were found for once, and then deserted, were not counted.

RESULTS AND DISCUSSION

The findings of the present study as well as relevant discussion have been presented under following heads:

Breeding season:

The bird started their breeding activities in June and completed it in October. According to Whistler (1949), Smythies (1953), Ali and Ripley (1968), Begum (1997) and Siriwannichkul (1981), the breeding of the little cormorant starts in May and continued until October. Only a slight variation was observed. In the study area, breeding season started from 2nd week of June continued until 1st week of October. The peak month in nesting was observed between July and August in the present observation.

Breeding colony:

During the study period, the little cormorant built their 25 nests with egrets and herons in same location but in different trees. The little cormorant breeds on trees in company with darter and egrets (Smythies 1953). Ali and