International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Breeding Biology of Small Pratincole in Kadegaon Wetland of Sangli District.

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Abstract

Birds are regarded as the most significant indicators of the overall health of an ecosystem. Numerous bird species rely on wetlands for breeding, nesting, roosting, and foraging**.** The present study was conducted during the period from January 2025 to June 2025 at the Kadegaon wetland, Sangli District. Regular visits were conducted during the period to study breeding behaviour and nest site selection by pairs. The visit was done from 8:00 am to noon and from 4:00 pm to 6:00 pm. The breeding behaviour of the wetland birds was observed using a Nikon 8 x 42 mm Binocular. Photographic observations were performed using a Canon 65x optical zoom camera with a 20.3-megapixel lens. For the detailed examination, nest and egg characteristics were considered, as the size of the nest, shape of the nest, material used for nesting, colour, shape, and length of the eggs.

Keywords: Breeding Biology, Small Pratincole, Wetland, Sangli District.

Introduction

The population and frequency of birds in specific wetland habitats indicate environmental quality, pollution, food availability, and habitat safety. Natural and artificial wetlands serve as effective breeding grounds for a variety of wetland bird species. Wet birds pull up in search of optimal climate conditions, proper nesting sites, and reliable food supplies. Wetlands provide optimal conditions for migratory birds and act as exclusive breeding grounds (Silva et al., 2017; Giese et al., 2018). Breeding areas include small areas. This species is 16.5-18.5 cm long and has a wingspread of 42-48 cm. The bird has a triangular short cock with small legs, long tips, and white terminals. Short billing is airline-compatible. They usually eat insects. The head crown is brown, and the belly is white.

The small pratincole (Glareola lactea) is a member of Glareolidae, a local breeder in India and West Pakistan, Bangladesh, Burma, Laos, Cambodia, Sri Lanka, and Thailand. Breeding from Gravel, the Sandbox, and rivers near the lake from December to March, lays 2-4 eggs in the wound on the ground. Breeding areas include small areas. This species has an average length of 16.5-18.5 cm and 42-48 cm with full wingspread. The bird has small legs with extended tips and a short cock with white terminal triangles. Short billing is adapted to aviation. They usually eat insects. The head crown is brown, and the abdomen is white.

Study area

Kadegaon is a taluka in Sangli district, Maharashtra. It is located in the Pachim Maharashtra region. The sampling was done at the Kadegaon wetland, which is located about 4.3 km away from the village of Kadegaon. It is located at Lat $17^0$17’24” N Lon $74^0$19’06” E. The Kadegaon wetland is one of the largest

waterbodies in Kadegaon Tahsil, Sangli District. It covers approximately 3,571 km² of surface area, and its temporary islands provide protective shelter to wetland birds for breeding and nesting purposes.

Materials and Methods

This study was conducted during the breeding season from January 2025 to June 2025. The orderly visit was completed from 8 am to 12 pm. Visits will also be held from noon until 4 pm to 6 pm. Breeding activities of wetland birds were observed using Nikon 8 x 42 mm binoculars. Photo observations were performed using a 65x optical zoom camera with a 20.3 megapixel lens. Bird nest buildings and breeding mainly begin in February to June. Therefore, the period was selected. In the course of the study, nest characteristics, including nest type, shape, color, and distance from water and distance between the two nests, were recorded. Eggs were observed in color, marking, shape, length, width, clutch size, incubation time, and slipcase. Nes and egg parameters were measured using a 30-m measuring band and measurement scale. Nest places were recorded using the GPS (Global Positioning System) of cameras (Kumar et al., 2020). The nest building, hatching, and incubation period were completed based on observations and photographs.

Result and Discussion

Last week of February 2025, we observed two adults of small pratincole searching for a protected nesting area in the rocky habitat of the wetland. To study, we visited regularly to observe that the same birds were found in that particular place every time. And based on observation, we detected the nest on 6th March 2025 in between rocky habitat (Fig. 1). The nest was a little depression in the rocks, and the clutch size was two eggs. On 27th March, we observed the pair with alarming behaviour, suggesting the presence of juveniles. In that regard, we had been searching in the nearby area where we found a small pratincole chick. In the course of the study, more than 40 nests of small pratincole were observed, with an average nest size of 88.3 mm. These birds raise their nests on the ground by making a shallow pit. The eggs of small pratincoles are typically a shade of sand brown to light green, embellished with speckles. The average egg size was 25.8 mm in length and 22 mm in width, with a maximum clutch size of 3 eggs per nest. The incubation period lasts for 15-20 days, and both parents share the responsibility of incubation. Generally, the vigilant behaviour of males was observed throughout the study period. The peak breeding season of the small pratincole was April, and in the last week of May, all chicks fledged.

Wetlands serve as ideal breeding and feeding sites for migratory bird species. They play an important role in maintaining the natural cycles and also contribute to the biological diversity of their habitat. Wetlands play a crucial role in the migration of wetland birds, acting as vital stopover sites during their long journey. Saad et al. (2010) conducted a study on the breeding habits of collared pratincoles, Glareola pratincola, in two coastal regions of northwest Morocco. They noticed that the number of successful breeding attempts was greater in the rocky environment compared to the sandy environment. They noticed a higher number of nests in 2021 compared to the following year. Sponza and Salvador (2023) documented a new successful breeding site for the Collared Pratincole along the northern Adriatic coastline. Ozturka and Ozkan (2023) studied the reproductive Biology and egg dimensions of the collared pratincole. Similarly, Zainab et al. (2022) conducted a study on the breeding habits of wetland birds in the Malkhed Lake and Chhatri Lake of Amravati, Maharashtra.

Conclusion

The results obtained from the study show that the Kadegaon wetland provides a good breeding ground for wetland birds. Observations made during the current study can be used for the conservation of water birds of the study area in the future.

Fig. 1. Nest of small pratincole

Fig. 2. Egg Incubation

Fig. 3. Chick

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