

## Nesting record of Oriental Pratincole in Debrigarh Wildlife Sanctuary, Odisha, India

The Oriental Pratincole *Glareola maldivarum* (Forster, 1795) is one of the three species of genus *Glareola* found in the Indian subcontinent that belongs to the family Glareolidae and order Charadriiformes (Rasmussen & Anderton 2012). Globally, the breeding population subsists between the southeastern Palearctic and the Indo-Malayan realms that range from the Indian subcontinent to eastern Mongolia, China and parts of Japan; and the wintering habitat spreads from the Indo-Malayan to the Australasian biogeographic realms (BirdLife International 2020).

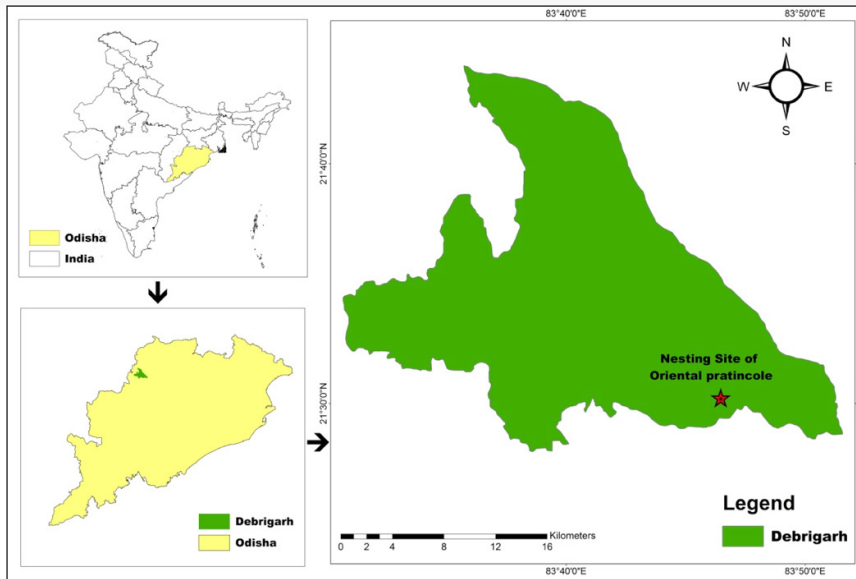
In the subcontinent, it has been recorded breeding from Sind, through northern India to Odisha, West Bengal, Assam and Bangladesh and has been recorded from Kerala, Sri Lanka, and Maldives in south and also been recorded from Lakshadweep Archipelago recently (Khan 2017). As



Oriental Pratincole *Glareola maldivarum*. © Bhubaneswar Patra.



Oriental Pratincole nest with egg clutches.



### Nesting site of the Oriental Pratincole on the bank site of Hirakud Reservoir.

per the literature survey, the species has isolated records more or less throughout the subcontinent (Ali & Ripley 1987; Grimmett et al. 2011; Manakadan et al. 2011). In Odisha, it has been recorded from Chilika, Nalabana, Mangalajodi, Bhitarkanika, and Hirakud (Balachandran et al. 2002; Gopi & Pandav 2007; Grimmett et al. 2011; Nair et al. 2014). The breeding records of Oriental Pratincole were earlier reported at Nalabana islands, Odisha (Balachandran et al. 2002). Nair et al. (2014) documented seven species of colonial ground-nesting birds including Oriental Pratincole from the Hirakud Wildlife Division; however, their nesting record

has not been reported from other suitable habitats in Odisha except Nalabana Wildlife Sanctuary, Chilika.

Oriental Pratincole is a moderately sized (18–30 cm) short-legged shorebird much similar to Collared Pratincole. They have shallow like tail-fork, long pointed wings but

the tail tip falls short to the wing tip at rest. The breeding plumage contains strong perch-orange underparts, a cream throat bordered by black gorget (Grimmett et al. 2011). Pratincoles are a group of desert-adapted shorebirds that are also colonial ground nesters which breed on sandy shores or lagoons and saltmarshes (Higgins & Davies 1996). These birds breed mostly in summer in colonies and nest on the open ground with a shallow scrape or natural depression.

On 20 June 2019, during fieldwork carried out by the research team of Odisha Biodiversity Board at Debrigarh Wildlife Sanctuary, the team observed three individuals of Pratincoles



**Oriental Pratincole producing threat calls nearby the nest.**



**Oriental Pratincole incubating eggs.**

hovering over the bank of Hirakud Reservoir (21.5039°N & 83.7744°E). The reservoir has a large forest fringe on one side adjoining the Debrigarh Wildlife Sanctuary and in summer the exposed bank area provides nesting ground for variety of shorebirds. The observed birds were flying fast, constantly changing directions and producing sharp calls. It is a common behaviour in pratincoles or other colonial ground-nesting birds to evade predators near the vicinity. Soon after, a nest clutch with three eggs was spotted at the dried out bare flat formed due to receding of water from the reservoir, surrounded by small grasses and shrubs. Eggs were oval or sub-elliptical in shape,

smooth, creamy coloured, spotted and streaked black or dark brown. After sighting an individual near the nest and the literature survey, it was confirmed that the nest was of Oriental Pratincole (Higgins & Davies 1996). After that, the bird activities were observed silently just away from the nest, following 10 minutes of

observation, another Oriental Pratincole landed about 3-5 meters away from the nest and watching over us and producing a continuous threat call. Since then, the bird gradually approaches the nest and after some time, it sat on the egg clutch to incubate probably. After some time, another individual came to incubate. The predator evading behaviour in Pratincoles differs with respect to different predator size. Small predators are chased off by a single parent while the other incubates the eggs (Jayasinghe et al. 2018) but in the case of large predators, both the parents take charge. It also differs depending on weather conditions. In pleasant



**Livestock grazing pose threats to the natural breeding habitats of Oriental Pratincole.**

weather, both the parents engage in evading predators while in temperate conditions, one parent incubates and the other drives off the invaders (Jayasinghe et al. 2018). Since ground nesters, these birds face many natural as well as anthropogenic threats as these are small birds and are unable to chase off invaders like stray dogs and other birds of prey.

Apart from this, wetlands are an easy target of anthropogenic disturbances and the Hirakud Reservoir is also not barred from that. Though there are some regulations still people are fishing in the reservoir, grazing of livestock along the banks cause serious threats to the nests of these shorebirds. Poaching is one of the greatest threats to the birds which require constant watch by the forest department. All these problems can be reduced by awareness of local people, making them a part of the major stakeholder and promote them for conservation. To prevent the disturbances, the sanctuary management should take measures to ensure successful breeding of these shorebirds. Future studies are needed to understand the behaviour and ecology of these shorebirds which will help in further implementation of a proper conservation plan.

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**Acknowledgements:** We thank the Chairman, Member Secretary, Odisha Biodiversity Board for allowing us to carry out biodiversity survey in Debrigarh Wildlife Sanctuary. We are very much thankful to Divisional Forest Officer, Hirakud Wildlife Division for logistical support during survey and Sri Suraj Kumar Swain, JRF, OBB for helping in preparation of map.

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**Citation:** Das, A.K., S.K. Jena, B.K. Majhi & S. Behera (2021). Nesting record of Oriental Pratincole in Debrigarh Wildlife Sanctuary, Odisha, India. *Bird-o-soar* #84, In: *Zoo's Print* 36(5): 33–36.