



**ORIGINAL RESEARCH PAPER**

**Zoology**

**COLLARED PRATINCOLE (GLAREOLA PRATINCOLA) FIRST SIGHTING IN DHULE (MAHARASHTRA) AND ITS RELATION WITH MIGRATION PATTERN AND SIGHTING HISTORY IN INDIA.**

**KEY WORDS:** Earthfill reservoir, Collared Pratincole, Glareola Pratincola, Dhule, habitate, Climatic condition, migration, movement pattern.

|                             |   |
|-----------------------------|---|
| <b>Dr Prashant J Patil*</b> | Associate Professor, SBH Government Medical College, Dhule, Maharashtra.<br>*Corresponding Author |
| <b>Pranav V More</b>        | EcoWarriors Nature Group, Dhule & Dipstambh Carrer Institute.                                     |
| <b>Atul R Vibhandik</b>     | Artist, SBH Government Medical College & EcoWarriors Nature Group, Dhule.                         |

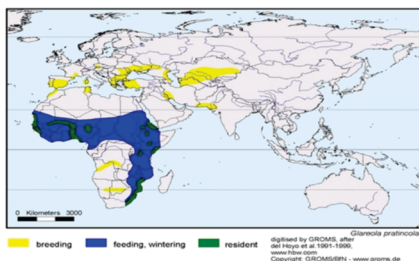
**ABSTRACT**

Sonwad Dam is an earthfill reservoir near Sindkhede, in Dhule district, located at 21.0671457° N, 74.8353267° E. During Asian Wetland Bird Census 2019 visit, on 10th Jan 2019 at 3.30 pm a pair of Collared Pratincoles (*Glareola Pratincola*) was sighted for the first time. A follow-up visit on two more occasions about a weeks apart showed its presence. Confirmed presence of the pair of Collared Pratincole in the Sonwad Dam area in Dhule district was for more than 18 days (10<sup>th</sup> Jan to 27<sup>th</sup> Jan 2019). Each visit presence of more Collared Pratincoles was sought, but none were found. There are very sparse sighting records of such long duration stay of bird in Maharashtra. Duration of presence indicates its winter migration period. Records of Collared Pratincole sightings and nearest breeding places for last 10 years were studied and compared. Close proximity with Gujarat, favorable habitat and climatic condition indicate observation of migration and movement pattern of Collared Pratincole in Dhule.

**INTRODUCTION:**

Collared Pratincole (*Glareola Pratincola*) is a wader migratory bird to India. Under International Conservation action migratory species need to be protected along it flyways. As many of the world's migratory species are in decline, assailed by multiple threats we are bound to protect Collared Pratincole<sup>(1)</sup>. Collared Pratincole is a small wader, measuring 20 to 25 cm in length and weighing 60 to 100 grams. It is distributed (Map 1) in northwest India, Pakistan, Afghanistan, southwest Asia, Middle East, southern Europe, northern Africa, and central and eastern Africa<sup>(2,3)</sup>. This species has an extremely large range, even though it has declining population trends so it is in the least Concern species<sup>(4)</sup>.

**Map 2: Distribution map of Collared Pratincole<sup>(5)</sup>**



**MATERIAL & METHOD:**

**Study Area:**

The present observational study was done at Sonwad Dam an earthfill reservoir on Sonwad River near Sindkhede, Dhule district of Maharashtra in India. It is located at 21.0671457° N, 74.8353267° E. There is vast pasture, grassy wetland along the eastern shoreline of the dam along with fields. The study was carried out during 2 months period of January and February 2019. It was field observational study by team of three observers using Binoculars Olympus (8x42) along with Nikon P500 camera for photographic confirmations.

**OBSERVATION:**

On occasion of Asian wetland census, on 10<sup>th</sup> January 2019, at 3.30 pm a brownish bird was spotted on the ground with a forked tail with black collar from the base of the eyes to the throat. On detailed observation, by binoculars (8x42), the bill was black at anterior with red base and wing s tip were reaching up to the tail tip. In flight white trailing edge to secondaries was seen. With help of photographs (Photo 1 & 2) the identification of bird was confirmed as Collard Pratincol i.e *Glareola Pratincola*<sup>(2)</sup>.

The bird was first spotted in dried banks of the lake. Its head was up as if searching or scanning for insects in the air above the

ground. It used to run for the distance of 2 to 3 meters as soon as it spotted the prey i.e. insect to catch.

Another Pratincole was spotted at about 50 meters away from the first bird in the pasture area hunting for insects on the ground. After 30 minutes the Collared Pratincole flew from the first spot to second collared Pratincole. Both the birds were 5 meters away from each other and were hunting for insects and covering the ground by running. It happens to carry on that activity of searching and catching the prey by running toward it for two and a half hours. As the Sun had set and it was dusk, the two birds flew towards the shore and were lost. As we followed the direction of the bird on the way we found one Collared Pratincole sitting in the dried foot holes marks of cattle feet. As we reached there it flew away not to be seen or traced.

**Photo 1: Collared Pratincole hunting in pastureland.**



Collared Pratincole pair was traced again the second time on 15<sup>th</sup> Jan 2019; it was again spotted just 10 meters away from the spot it was first sighted. The pair was observed for 3 hours hunting insect on the ground by running towards it to catch. The pair was lost after sunset not to trace.

**Photo 2: Collared Pratincole in flight showing white trailing edge to wings**



On 27<sup>th</sup> January at 3 pm on the third visit to the same place, Collared Pratincole was not found near the previously spotted point. At 3.45 pm after searching near the shore at about 400 meters distance from previous spots the pair of Collared Pratincole

was spotted again. As this wetland had vast pasture area it was same type of habitat for Collared Pratincole. Both the Pratincoles were scanning the area and hunting for insects. After one hour both Collared Pratincole flew to another side of the lake.

**Table 1: Last 10 years spotting status of Collared Pratincole.**<sup>(9)</sup>

| Sr.No                 | State     | Location                                    | Occurrence   | count   |
|-----------------------|-----------|---|--|---------|
| <b>In Maharashtra</b> |           |   |  |         |
| 1                     |           | Nandur Madhmeshwar Bird Sanctuary, Nashik   | 20 <sup>th</sup> Oct 2017                                | 8       |
| 2                     |           | Chhatri Lake, Amravati                      | 1 <sup>st</sup> March 2014                               | 1       |
| <b>Other states</b>   |           |   |  |         |
| 3                     | Kerala    | Kolewetland, Manakodi, Thrissur             | 9 <sup>th</sup> Feb 2019                                 | 52      |
| 4                     | Karnataka | Hessaraghatta lake, Bangalore               | 20 <sup>th</sup> Jan 2019                                | 1       |
| 5                     | Gujarat   | State Highway 136, Kayla, Ahmadabad         | 26 Jan 2019  | 50      |
| 6                     | Gujarat   | State Highway 17, Vitthalgad, Surendranagar | 15 Dec 2018  | 23      |
| 7                     | Gujarat   | Nal-Sarovar Bird Sanctuary, Ahmadabad       | 2 <sup>nd</sup> June 2018<br>30 <sup>th</sup> March 2018 | 8<br>20 |
| 8                     | Gujarat   | Little Ran of Kach                          | 31 <sup>st</sup> Jan 2009                                | 24      |

Collared Pratincole was not spotted on 4<sup>th</sup> visits on 3<sup>rd</sup> February 2019 afternoon from 3 pm onward. The absence of Collared Pratincole was confirmed by the fifth visit on 9<sup>th</sup> February 2019 in morning 8 am to 12 noon. Confirmed presence of the pair of Collared Pratincole in the Sonwad Dam area in Dhule district was for more than 18 days (10<sup>th</sup> Jan to 27<sup>th</sup> Jan 2019). Each visit presence of more Collared Pratincole was sought around, but none were found.

**DISCUSSION:-**

Collared Pratincole species are mostly migratory birds. It breeds in Mediterranean region, Middle East, Southwest Asia, Afghanistan, southern Europe, Pakistan and northwest India. The breeding season of these collared Pratincole species is from May to August in southern Europe.

The breeding season is during May and June in the Middle East. The laying season is from April to July in Pakistan and northwest India. The collared Pratincoles are highly gregarious and roost in flocks in wintering habitat and return to breeding colonies in late February<sup>(3)</sup>. Return movement begins late March or April, with arrivals in European breeding quarters mainly April to mid-May<sup>(5)</sup>. The northern populations migrate southwards for wintering in savannas of Sahel region in central Africa and also eastern Africa and India<sup>(6)</sup>. Some of the populations in central, eastern and southern Africa are resident or nomadic.

The artificial ecosystems of these Pratincole species include plowed fields, harvested agricultural lands, and pastureland. These Pratincole species take most of their insect prey on the wing. But This habit was not seen at all during our observation period. IT was always seen hunting the insects on ground while running. They forage over water and also feed on the ground in plowed fields, recently burnt open ground, overgrazed grassland, wastelands, rice-fields, and scrubland<sup>(3)</sup>.

Collared Pratincole is sparse winter migratory bird in India. In India, the breeding populations of the collared Pratincole species occur in the states of Gujarat, Rajasthan, Punjab, and Haryana while winter migration is also noted in some South Indian and Eastern states<sup>(7)</sup>. They winter in sub-Saharan Africa. Its presence was never reported until today in the North Maharashtra region of districts of Dhule, Nandurbar or Jalgaon. Nearest sighting of the bird in Gujarat that is 244 km west has number of sighting records<sup>(8)</sup>. Other than Gujarat sighting in India, in Maharashtra single sighting of Collared Pratincole were noted in 176 km Southwest i.e. in Nashik

<sup>(8)</sup>, 370 km East i.e. in Amravati<sup>(9)</sup> and in Bhigwan Pune i.e. 390 km South (undocumented). All these are above 100 km radius away from the bird's range of our sighting (Table 1).

Dhule lies in the Khandesh region, which forms the northwest corner of the Deccan Plateau. The Dhule district is bordered in the west by the Gujarat State and in the north by Madhya Pradesh along with Nandurbar district, and in the south and east by Nashik district and Jalgaon district respectively. It is situated in a valley of Tapi River along the banks of Panzara River.

The pastures and cattle grazing land were the favorable habitats for the winter migratory bird never spotted before in this part of Maharashtra. Collared Pratincole appears to be following West Asia/East African Flyway<sup>(1)</sup>.

It appears that Collared Pratincole is uncommon winter migratory wader in Dhule district which leaves by January. It may be in passage, migration or having a short stay in the area. As its nearest breeding area in Gujarat during April and Maharashtra is Southwest side of Gujarat it indicates that usually Collared Pratincoles may be regularly migrating in the nearby states. A longer stay does support to favorable habitat in the region or changing environmental trend affecting its migration. India has developed a national action plan for conservation of Migratory Birds and their habitat<sup>(10)</sup>. Being located in the core of the Central Asian Flyway, and several important migration routes the country covers a large intra-continental territory between the Arctic and the Indian Ocean. Collared Pratincole is needs to be tracked and protected due to Convention of migratory bird conservation. Further studies on its season trend in the area need to be taken.

**CONCLUSION:**

Data reports and sighting reports indicate the scare presence of Collared Pratincole in India. In Dhule district there was never the sighting but its presence for long duration indicated its winter migration to this are which needs to be tracked yearly. It adds to diversity of avifauna found in north Maharashtra region.

**REFERENCES:**

1. BirdLife International (2010); The flyways concept can help coordinate global efforts to conserve migratory birds. Downloaded from <http://www.birdlife.org> on 02/03/2019.
2. Grimmett R, Inskipp c and Inskipp T (2007). Birds of the Indian Subcontinent. 2nd Edition, Oxford University Press, India. Pp 168.
3. Faheem Mahmood Syed. Birds of India / Bird World. <https://indianbirds.thedynamicnature.com/2017/06/collared-pratincole-glareola-pratincola.html>Last assessed 10 Feb 2018
4. BirdLife International. 2017. Glareola Pratincola. The IUCN Red List of Threatened Species. M 2017: e.T22694127A120026910. <http://dx.doi.org/10.2305/IUCN.UK.2017-3.RLTS.T22694127A120026910.en>
5. Avibirds Profile Collared Pratincole., Almere. [http://www.avibirds.com/euhtml/Collared\\_Pratincole.html](http://www.avibirds.com/euhtml/Collared_Pratincole.html) Last assessed 15 Feb 2018
6. Pope Mike and Stam Zogaris. Biodiversity East, Collared Pratincole. <http://www.kuwaitbirds.org/birds/collared-pratincole>, Last assessed 12 Feb 2018.
7. Rajeevan, P. C. & Thomas, J., 2013. First record of Collared Pratincole Glareola pratincola from Kerala. Indian BIRDS 8 (2): 49–50.
8. <https://www.ebird.org/Collared-Pratincole/References/13/Collared-Pratincole-eBird.html>. Last assessed 22 Feb 2018.
9. Morey KP, Abhang NA, Kadu GS, Wagh GA, Wadatar JS. First Report of Collared Pratincole (Glareola Pratincola) in Amravati district of Vidarbha, Maharashtra. Newsletter for Birdwatchers. 2015; 55.
10. Government Of India. India's National Action Plan for Conservation of Migratory Birds and their Habitats along Central Asian Flyway (2018-2023). Ministry of Environment, Wildlife Division. F. No 4-37/2017 WI (part-2) Dt-30/08/2018.