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Breeding record of Little Ringed Plover Charadrius dubius jerdoni Legge, 1880 (Charadriidae: Charadriformes) from Tamil Nadu, India

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The Little Ringed Plover *Charadrius dubius* is a widely distributed small shorebird (body mass 26-53 g) (del Hoyo et al. 1996) of the family Charadriidae. The bird has been recognized as 'Least Concern' by the IUCN Red List and is represented by three sub species, viz.: Charadrius dubius curonicus (Gmelin, 1789), Charadrius dubius dubius (Scopoli, 1786), and Charadrius dubius jerdoni (Leggie, 1880). C.d. jerdoni is a resident species in the Indian subcontinent and southeastern Asia (Kirby & Scott 2009). A literature review about the breeding sites of the Little Ringed Plover in the Indian subcontinent from available published records are from Jhelum, Kashmir (Wilson 1899), Kashmir Valley (Phillips 1946), Sindh & Lidder rivers of Kashmir (Haq et al. 2021, 2022), Khyber Pakhtunkhwa, Pakistan (Whitehead 1911), Bajura, Himachal Pradesh (Whistler 1926), Brahmaputra sandbanks (Baker 1935), Faizabad, Uttar Pradesh (Eates 1937), Gadilam river, Attur, Tamil Nadu (Krebs 1956), Kavassery, Kudallor, Chittur & Palghat, Kerala (Neelakantan 1992) and Jawai dam, Tal Chappar & Phulera, Rajasthan (Sangha 2021). In Sri Lanka, the

subspecies *C.d. jerdoni* is supplemented by *C.d. curonicus* as winter visitors (Harrison 1999).

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During our regular shorebird monitoring on inland wetlands, we documented a breeding account of *C.d. jerdoni* from Uppar dam, Dharapuram, Tamil Nadu (10.7789 N, 77.4215 E) (Figure 1). Till now, many shorebird species have been recorded from this area by us. The species include Little Stint *Calidris minuta*, Grey Plover *Pluvialis squatarola*, Ruddy Turnstone *Arenaria interpres*, Curlew Sandpiper *Calidris ferruginea*, Terek Sandpiper *Xenus cinereus*, and Red-necked Phalarope *Phalaropus lobatus*. The study site also supports other large wading birds including cormorants, storks, egrets, and herons. The vegetation on the fringes, including the adjacent farmlands, support many land birds as well. The main plant species include *Acacia nilotica* and *Commiphora caudata*.

The Little Ringed Plover can generally be found on river banks, tidal mudflats, estuaries, and lake edges in small numbers. The species normally avoid rough or broken terrain, forest, cultivated land or pastures, and

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Breeding record of Little Ringed Plover from Tamil Nadu

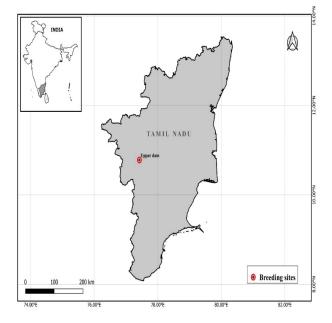


Figure 1. New breeding record of *Charadrius dubius jerdoni* from Tamil Nadu, India.

tall or dense vegetation including vegetated margins of inland waters (Cramp & Simmons 1983). During the breeding season, the Little Ringed Plovers show a preference for bare or sparsely vegetated sandy and pebbly shores of shallow standing freshwater pools, river islands, lakes or slow-flowing rivers, dry and stony riverbeds, and dune slacks (Johnsgard 1981; Cramp & Simmons 1983; del Hoyo et al. 1996; Grimmett et al. 1998).

The mating of the Little Ringed Plover (Image 1) was recorded from Uppar dam, Dharapuram, Tamil Nadu on 23 February 2022. The sexes are alike, but the male is a little larger than the female. On 17 October 2022, during our routine survey of birds in the area, after the brief wet period, we observed few plovers moved away as we approached them, except for one that continued sitting on the ground. We gently moved towards the bird after observing it for some time and found a nest with three eggs in it (Image 2). The dull-coloured eggs with black spots were small and shaped like peg tops. As we approached the nest, the bird moved away from the nesting area for a few minutes and came back to the nest. As we gradually moved away from the nesting area, the female started incubating the eggs again. We further observed that it preferred foraging in between and reached the water nearby, bathed and wet the eggs with its abdominal wet feathers, as if to cool the eggs or to maintain temperature. This was replicated several times on a sunny day. Though our study was



Image 1. Mating of Little Ringed Plover. © Yoganathan Natarajan.



Image 2. Incubating adult with eggs. © Yoganathan Natarajan.



Image 3. Little Ringed Plover chick. © Yoganathan Natarajan.

not designed mainly to observe nest attendance, casual observations revealed that the female incubated while the male stood guard nearby. Whenever the female left for foraging, the male incubated the eggs. The nest we observed was a shallow scrape in the soil near the water. We also observed that due to continuous flight and roaming around wet soil, the tiny feathers over the abdomen portion about to fall were used as insulating material for the nest. When it causes depression with its abdomen on the moist soil of the bank, feathers of the nesting bird are shed inside the nest pit and become cushioning and insulating material for the eggs.

During breeding plumage, the Little Ringed Plover has a yellow circle that is visible around its eyes. The black ring around the neck becomes thicker. *C.d. jerdoni* can be differentiated from the other two subspecies by having an extensive white patch on the forehead and black on the forecrown. Also, a broader orbital ring (yolkyellow) and pinkish-red (not yellow) are noted on the lower mandible (Hayman et al. 2011). As we observed the adults incubating, we confirmed the breeding record of the sub species. On 22 November2022, we further recorded the chicks from the same pair at the study site (Image 3). Furthermore, we observed that grasshoppers and worms were fed to the small chicks on hatching and parents attended and escorted the chicks till the second to third weeks.

The breeding record of the Little Ringed Plover C.d. jerdoni from Uppar dam, Dharapuram, Tamil Nadu is extremely significant as this inland wetland serves as a breeding ground for many shorebirds. Even though this area is not a protected area, it serves as an important habitat for many threatened waterbirds, during migration. Besides having rich bird diversity, the area is witnessing many changes as many landowners are converting barren land for real estate purposes leading to habitat destruction for birds and other small mammalian species like Madras Hedgehog Paraechinus nudiventris. Poaching of small mammals is also observed in this area. Additionally, these breeding species have varied breeding seasons with limited breeding ranges from different regions of the Indian subcontinent. As the habitat changes are happening at a rapid pace throughout the country due to various economic reasons, this breeding record further underlines the need for wide-ranging wetland surveys throughout peninsular India, to acquire more knowledge on the Little Ringed Plover nesting sites and the need for further conservation.

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