

Interesting foraging behaviour of Crab Plover in Manali Island, Gulf of Mannar, India

The Crab Plover *Dromas ardeola*, the only member of the family Dromadidae, is an elegant and unmistakable species with the restricted range extension recorded from limited sites in India. Ali & Ripley (1983) mentioned that in India it winters in small numbers on the western coast and peninsular India. On the western coast, the beaches and the islands of the Gulf of Kutch and Saurashtra coasts are the most favoured haunts of this species, where it occurs in a few thousands.

On the eastern coast, it is presently seen only in Manali and Hare islands. The foraging observations were done during the coastal bird monitoring study done during the years 2018 and 2019 on the island of Manali in the Gulf of Mannar Biosphere Reserve.

The Crab Plovers look more like plovers but have very long grey legs and a strong heavy black bill similar to a



Crab Plover flight.



Feeding on elevated mudflats and in pools.

tern. Its black-and-white plumage and long-necked upright posture with a heavy bill make it distinctive and unmistakable. Its bill is unique among waders and specialized for eating crabs

(Hayman 1986). I found some interesting foraging behaviour of these birds during our recent field site visits. Crab Plovers forage using a distinct walk-stop-look method, obviously using their



Crab Plover maintaining distance while foraging.



Crab Plover flocks.

eyes to locate prey in the low tides in the intertidal zones of the Manali island. Foraging occurred in a small pool of water either on the edges or inside the pool where the depth was less. The birds also ran to the higher sand flat parts between the pools and continued foraging for some

time. The birds kept a distance between themselves (Soni & Bhuva 2007). During stops, the Crab Plover turned its head and looked for potential prey in the near vicinity. Prey was located by eye; however, during the observations, it was noted that whilst hunting in a pool a bird

regularly dipped its slightly open bill into the water. This action was repeatedly done and is similar to that found in many *Calidris* species (Swennan et al. 1987).

The prey was collected by chasing the bird while feeding and the leftovers were

identified. The smaller crabs were grabbed with the bill and swallowed whole, while larger crabs were stabbed with the bill, dismembered, and eaten. The foraging Crab Plover was seen moving around the prey in a circle with its head and neck facing the prey. The legs were rapidly lifted from the water and the bill simultaneously stabbing at the prey. When the prey was seized it was lifted immediately taken from the pool onto a higher area while being held by the legs. It was shaken and dropped, the legs being pulled or shaken off. The legs were always eaten first, then the body was eaten as a whole or broken up, by placing it on the sand and stabbing the underside. This method was always adopted for larger crabs. The prey species included crabs (*Thalamita crenata*, *Macrophthalmus depressus*, and mostly juveniles of *Portunus portunus* & Fiddler Crab *Uca* spp.), common burrowing crab *Macrophthalmus parvimanus*, and *M. telescopicus* (Penny 1971; Balachandran 1990).

Crab species from Manali Island - Gulf of Mannar.



Macrophthalmus sp.



Portunus pelagicus.



Uca annulipes.



Crab Plover foraging.

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H. Byju

Independent Researcher, No. 35, Rakatchi Garden, Ganapathy P.O., Coimbatore, Tamil Nadu 641006, India. Email: byjuhi@gmail.com (corresponding author)

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