Breeding biology of the Crab Plover (Dromas ardeola) on the Mond Islands, northern Persian Gulf, Iran

ABSTRACT

The present study describes the breeding biology of Crab Plovers (Dromas ardeola), a little-known shorebird species nesting on Nakhilu and Omol-Karam Islands located in the Nakhilu Marine National Park in the northern Persian Gulf, Iran. This study occurred during the breeding seasons of 2009-2011. Colonies had between 500-1,500 nests and were located on sand banks 1-3 m higher than the surrounding ground in non-overlapping areas. Burrow digging began in mid-April, and single nests were built in 2.82 ± 0.1 days (Range = 2-4 days, n = 45) in a period of 10.5 ± 0.76 days (Range = 8-13 days, n = 6), although a spread of digging and laying of 87.50 ± 2.96 days (Range = 82-94 days, n = 4) was recorded primarily due to renesting after human damage to the burrows. Range in nest densities was 0.14-0.26 nest per m2. The clutch size was 1.01 ± 0.005 (Range = 1-2, n = 421). Egg size (n = 47) was 64.05 × 44.04 mm with an average incubation period of 33 days (Range = 31-35, n = 21). Hatching success was 63-81%, with failures primarily due to egg collecting by local fishermen and tourists. An estimated of 7 weeks passed between hatching and fledging. Fledglings had almost fully developed wings (83% of adult wing length) and feathers, but very low weight (about 55% of adult weight) and smaller bill length (only 60% of adult bill length). A stronger control of visitors and local fishermen would benefit the breeding population of Crab Plovers on the islands.

Keyword: Breeding biology; Chick growth; Crab Plover; Dromas ardeola; Persian Gulf