

Colony site characteristics of sympatric breeding tern species on the Mond Islands, the Persian Gulf

ABSTRACT

We have investigated characteristics of colony site of three sympatric breeding tern species on small islands of a subtropical region, the Persian Gulf. The three most populous ground-nesting waterbird species – Bridled Tern *Onychoprion anaethetus*, Lesser *Thalasseus bengalensis* and Greater *Thalasseus bergii* Crested Terns – were studied during the 2009–2011 breeding seasons. The average area size of mixed colonies was 454 m². The density of nests of the Bridled Tern was 846 nests/ha. The proportion of the number of nests in a mixed colony for Lesser Crested Tern (5546 nests) was approximately 10-fold compared to the Greater Crested Tern (542 nests). The density of Bridled Tern nests/ha was significantly higher in areas with 50–75% vegetation cover (>1200 nests/ha) than in areas of <5% vegetation cover (72–105 nests/ha) ($p < 0.05$). Mixed colonies of the Lesser and Greater Crested Terns were located on unvegetated land, at an average distance of 4.1 m to vegetation, and on sandy soil (79.4% on average) and above high spring tide water lines (0.59 m on average). There were more potential nesting areas than occupied areas for the mixed colonies of the Lesser and Greater Crested Terns, indicated that they did not face nest site limitation.

Keyword: Colony site; Island; Persian Gulf; Waterbird; Tern