

## The Survey of Temporal and Spatial Distribution of Hermit Crabs in the Intertidal Zone of Larak Island (Strait of Hormuz, Persian Gulf)

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### Abstract

Spatial and temporal distribution of hermit crabs and their relationship with some environmental parameters in the intertidal zone of Larak Island were investigated through a seasonal sampling at five stations during 2011-2012. The amount of density of the hermit crabs community was calculated  $6.53 \pm 0.8$ . Density of the dominant species and also the hermit crabs community was found significantly different at some stations ( $P < 0.05$ ). Density in winter and in midtidal part was also significantly higher than the other seasons and parts ( $P < 0.05$ ). Based on density analysis, stations could be categorized in two clusters, with the spring season being greatly different from the other ones. The survey of the environmental variables showed that pH, slope, total organic matter, the percentage of silt and salinity had effective correlation with the density and distribution of the hermit crabs.

Keywords: *Distribution, Hermit crab, Canonical correspondence analysis, Intertidal zone, Larak Island, Persian Gulf.*

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