Investigating on Fish Abundance and Species Diversity Around Bandar-e-Lengeh Artificial Reefs, Persian Gulf

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Abstract
To recover habitats with depleted fish stocks, artificial habitats in coastal waters of Hormozgan Province were constructed from 2005 to 2011. Four hundred and thirty artificial reefs (Reef ball) were set up in which 12 sites were selected for sampling. The differences of fish assemblages through seasons and the differences in abundance and taxonomic richness of fishes among seasons and years of sampling were tested using statistical analysis. Abundance and taxonomic richness of fishes were not significantly changed during different seasons and years ($p>0.05$). Similarly, abundance of fishes was not significantly changed through years of sampling. Yet taxonomic richness of fishes was significantly changed between 2010 and 2011 ($p<0.05$). This difference may have occurred due to the ecological succession. Due to the fact that succession is a gradual process involving colonization and extinction of species, it can be concluded that the communities around these reefs may need more time to establish completely.

Keywords: Artificial reefs, Fish assemblages, Ecological succession, the Persian Gulf.