

The effect of artificial reefs on fish assemblage versus natural sites in the Bandar Lengeh-Iran.

ABSTRACT

Artificial reefs are used to compensate the destruction of marine ecosystems. In the present study, the effects of artificial reefs were compared to natural sites. For this purpose, five treatments including four different forms (Reef ball (R), Laneh Mahi (L), used materials (U) and R+L+U) of artificial reefs and one control were established. The reefs were deployed at Bandar Lengeh, the Persian Gulf. At each site, the fish sampling were carried out every three months for one year. According to data, significant differences ($p < 0.05$) were found between the artificial reefs and the control sites in terms of Catch Per Unit Effort (CPUE). Among the reef treatments, the best enhancement of CPUE was for the mixed form of reefs compared to other forms and control. The present study indicates that the artificial reefs deployed have enhanced the fish community.

Keyword: Artificial reef; Reef attraction; Comparative fish attraction; Reef fishery; Fish assemblage; Persian gulf.