

Intertidal Fauna of Kuwait's Coral Islands and Failaka Island

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Abstract : Intertidal transects of four of Kuwait's eight islands were sampled qualitatively and quantitative fauna. In total, 11 transects were sampled during spring tide lows (0 chart datum) as follows: Kubber, two transects; Qaurh, two transects; Umm Al-Maradem, three transects; and Failaka, four trasects. Qualitative and quantitative samples were collected at high, mid 1, mid 2, and low tides. In total, 270 invertebrate taxa and 15 vertebrate (fishes) taxa were identified. Failaka Island with 224 taxa was the most diverse. Second was Umm Al-Maradim with 84 taxa, followed by Kubbar with 47, and finally Qaruh with 38. Polychaetes were the most diverse group accounting for 31% of the taxa; decapods accounted for 17 %; gastropods, 14 %; bivalves, 12 %; and amphipods 11%. Fishes and echinoderms contributed on 5 and 3.5 %, respectively. Three Families of polychaetes are reported for the first time in the Arabian Gulf: Protodrilidae, Nerillidae, and Saccocirridae. Island sediments consisted mostly of sand, but a few transects contained up to 40% gravel. Total organic carbon was less than 1% at all transects, but total petroleum hydrocarbons (TPH) ranged up to 100 ppm on Qaru. This is expected because of natural seeps in the area constantly supplying the intertidal zone with oil globules. TPH on Umm Al-Maradim was less than 10 ppm, except at high tide on one transect where concentrations reached 40 ppm. In general, TPHs were less than 10 ppm.

Keywords : intertidal, Kuwaits waters, marine, invertebrates, fish

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020