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Original Article

ISSN : 2455-1953

**JGSR**  
*Journal of Geosciences Research*

Vol. 7, No.2, July, 2022, pp. 179-185

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## Depositional Environment of Jurassic Beds of Bela Island, Rann of Kachchh, Gujarat, India Using Ostracodes

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### Abstract

The present study focuses on understanding the depositional environment of Jurassic beds of Bela Island, Rann of Kachchh, Gujarat, India which is deduced mainly based on evidence furnished by ostracode fauna. Based on the distribution of 57 ostracode species in Jurassic beds of Bela Island, three biozones, in ascending order, *Cytheropteron micropunctata* Range Zone (early-middle Bathonian), *Progonocythere laeviscula* Range Zone (late Bathonian-early Callovian) and *Habocythere mouwanaensis* Range Zone (early-middle Callovian), have been established. The beds of *lowermost* Zone were deposited in shallow brackish water environment in the initial phase of marine transgression; the beds of middle zone were deposited at moderate rate of sedimentation in shallow sublittoral environment during the transgressive phase of sedimentary cycle; and the beds of *uppermost* zone were deposited in the shallow and brackish water condition in regressive phase of sedimentary cycle.

**Keywords:** Ostracode, Depositional Environment, Jurassic Beds, Bela Island, Rann of Kachchh

*(Received : 28 November 2021 ; Revised Form Accepted : 06 April 2022)*

<https://doi.org/10.56153/g19088-021-0076-11>