



## Editor's Note

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### In This Issue

Marine sciences current issue deals with the current research sciences most of the current issue deals with the aims and objectives of the work to re-evaluate the depositional environments and facies scheme which had been originally outlined by the previous authors by incorporating ichonological descriptions, new results and show the difference (s) between their work and theirs, proving what were wrong with the old definitions as they were. Show the improvement of your work on those of the older workers. This article is an experimental study in which authors use Mann-Kendall test for analyzing precipitation during summer and winter from 1901-2000 in Ladakh region (northern India) and give their interpetation to the results in the aims to analyse the impact of climatic changes. This study analyses depositional environments and facies of the middle Miocene (Agbada Formation), northwestern Niger delta, based on cores and well log data, and incorporating ichonological data, that has led to a revision and re-evaluation of the facies within the study area.

Sheraoh island is the most remote among Qatari islands, nearly 73.5 km south-eastern of the mainland of the peninsula. Observations were made partly by wading and snorkeling in the intertidal zone and partly by surveying the inland habitats. In total the 31 species were recorded, 4 species of halophyte plants: *Halopeplis perfoliata*, *Suaeda vermiculata*, *Salsola baryosoma* and *Zygophyllum qatarense*, one unexpected terrestrial mammal: the cape hare *Lepus capensis*, 2 species of visiting birds: *Motacilla flava* and *Anthus campestus* and one species of sea bird. The observations and collecting of coral skeletons and algal remains from intertidal zone indicated that there is a high diversity of corals and algae in the surrounding waters. The skeletal material of coral reefs was found covering a wide area of coastal region.

The long-term salination of two major osmolyte systems, the ocean and the inner environment of vertebrates has been compared. The

average osmolality of today's sea (1.09 Osm) is more than three times higher than that of the blood of land vertebrates (~0.3 Osm). Of the two major strategies for ionic adaptation, in the first pattern the osmolality of organisms (unicells, invertebrates, primitive vertebrates) equals that of the surrounding water, but the qualitative composition of body or cells fluid differ from those of the environment. To summarize the euhaline and eustatic changes of ocean, it is predicted that salination is becoming a serious concern of global life. Inversely correlated intermittent fluctuations of ocean volume and fresh water reservoirs are restricted to glacial and interglacial periods. The long-term salination process leads to the conclusion that the glacial-interglacial cycles will take place at increasingly higher salt concentrations of oceans resulting in gradually shortened and consequently more frequently occurring ice ages with gradually diminishing fresh water reservoirs.

The study of marine mammals described here outlines a simple test that can identify bone which is bona fide Steller's sea cow, and legal to sell. The test uses a segment of the D-loop of the mitochondrion, which has the power to exclude samples which are not specifically *H. gigas* or a sirenian relative. The test also includes a reliable method to extract DNA from bone and amplify it using PCR. Extracted DNA was sequenced to verify that only tethytherian DNA produced a positive result. This test found that samples sold as Steller's sea cow were actually gray whale (*Eschrichtius robustus*), pantropical spotted dolphin (*Stenella attenuata*) and white-beaked dolphin (*Lagenorhynchus albirostris*). Moreover, these data show that government agencies should monitor bones sold as Steller's sea cow or "mermaid ivory" because the bones of protected species are being traded as Steller's sea cow.