



## **Marine Biodiversity in Syria**

By  
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### **Abstract:**

Syria is located on the eastern shore of the Mediterranean between longitude 35 and 42 and latitude 32 and 37. It has an area of 185,000 sq. km., 58% of which is desert steppe.

The Syrian marine waters are characterized by high salinity, which reaches 4%. The waters are also characterized by high temperature, which reaches 28°C during summer, and poor content of nutritive elements such as NO<sub>3</sub> and PO<sub>4</sub> that play an important role in the growth of phytoplankton and other plants and organisms. The deficiency is due to the lack of sufficient movement of deep water, i.e. “up welling”.. The results of many field studies have shown that the biological mass of the benthic organisms equals 20 g/ m<sup>3</sup> at the depth of 1200 m.

1- Marine Flora: Reference investigations and field research have shown 660 species of algae that are included in 7 phyla, and 4 species of marine plants beginning to the phylum Spermatophyta.

2- Marine Fauna: Despite the quantitative deficiency in the primary and secondary productivity of Syrian marine waters, they seem to be rich in variety of animal life. The referential study and field research brought into view 1027 species in the coastal waters. These are related to different animal phyla (single celled, Spongia, Cnidaria, Ctenaria, Nematoda, Annelida, Arthropoda, Mollusca, Echinodermata, Chaetognata, Tunicata, and Vertebrata).

It is worth mentioning that the number of species spelled out by the reference study does not represent all animal species which are present in the Syrian marine waters. Many areas were not seriously studied. Therefore, there is a need for comprehensive studies, with special emphasis on deep waters.

Biodiversity is impacted by climate change through shifting habitats (towards the poles or upwards in elevation); increased die-offs and extinctions; and changes in body size, timing of life cycles, and distribution and abundance of species.

Since the opening of the Suez Canal in 1869, at least 320 Indo-Pacific marine species have entered the eastern Mediterranean basin, and are known as Lessepsian migrants. These introductions have produced important changes in the species composition of eastern Mediterranean communities (included the Syrian coast) and have resulted in mixed Red-Mediterranean sea communities. .

An important product of marine biodiversity research should be the necessary knowledge and tools for adequately managing and protecting marine biodiversity. This requires knowledge on genetic and ecological mechanisms that control biodiversity (gene flow, dispersal, adaptive value



of genetic polymorphisms, determination of dispersal and recruitment, species interactions including invasions, sediment transport, natural and human-induced catastrophes, etc.).

Presentations' Abstracts