

KANDASWAMI KANDAR'S COLLEGE, Velur, Namakkal (Dt)

Department of Zoology

Zoology Association Inaugural Function

Date: 23.01.2020

Chief Guest: **Dr. P.Santhanam,**

Associate Professor,

School of Marine Science

Bharathidasan University.

Thiruchirapalli.

Dr. P. Santhanam presented a talk on the topic “Importance of Marine Organisms and Oceans”. He explained **Marine life, sea life, or ocean life** is the plants, animals, and other organisms that live in the salt water of seas or oceans, or the brackish water of coastal estuaries. At a fundamental level, marine life affects the nature of the planet. Marine organisms, mostly microorganisms, produce oxygen and sequester carbon. Marine life, in part, shape and protect shorelines, and some marine organisms even help create new land (e.g. coral building reefs).

Most life forms evolved initially in marine habitats. By volume, oceans provide about 90% of the living space on the planet. The earliest vertebrates appeared in the form of fish, which live exclusively in water. Some of these evolved into amphibians, which spend portions of their lives in water and portions on land. One group of amphibians evolved into reptiles and mammals and a few subsets of each returned to the ocean as sea snakes, sea turtles, seals, manatees, and whales. Plant forms such as kelp and other algae grow in the water and are the basis for some underwater ecosystems. Plankton forms the general foundation of the ocean food chain, particularly phytoplankton which are key primary producers.

Marine invertebrates exhibit a wide range of modifications to survive in poorly oxygenated waters, including breathing tubes as in mollusc siphons. Fish have gills instead of lungs, although some species of fish, such as the lungfish, have both. Marine mammals (e.g. dolphins, whales, otters, and seals) need to surface periodically to breathe air.

As of 2023, more than 242,000 marine species have been documented, and perhaps two million marine species are yet to be documented. An average of 2,332 new species per year are being described. Marine species range in size from the microscopic like phytoplankton, which can be as small as 0.02 micrometres, to huge cetaceans like the blue whale – the largest known animal, reaching 33 m (108 ft) in length. Marine microorganisms, including protists and bacteria and their associated viruses,

have been variously estimated as constituting about 70% or about 90% of the total marine biomass. Marine life is studied scientifically in both marine biology and in biological oceanography. The term *marine* comes from the Latin mare, meaning "sea" or "ocean". The session was highly useful to our students and it has created an interest our students.



D. Senthil Kumar
Dr. D. Senthil Kumar, M.Sc., M.Phil., Ph.D.,
Associate Professor,
Department of Zoology,
Kandaswami Kandar's College
VELLUR - 638 182, Namakkal (Dt).

[Signature]
Coordinator
Internal Quality Assurance Cell (IQAC)
Kandaswami Kandar's College
Velur - 638 182, Namakkal Dt

D. Senthil Kumar
PRINCIPAL,
Kandaswami Kandar's College,
VELUR-638 182, Namakkal-Dt.

