OPEN ACCESS Freely available online

ISSN: 2473-3350
Journal of Coastal Zone Management

Short Communication

Importance of Marine Biodiversity and their Implications

Le Herbon*

Department of Terrestrial and Aquatic Wildlife, University of Veterinary Medicine Hannover, Hannover, Germany

DESCRIPTION

Marine ecosystems and biodiversity are inextricably linked to a variety of services required for sustainable development. These interactions frequently involve feedback loops and synergistic effects, and they are dynamic and complicated. These explain the need for an integrated and comprehensive approach based on ecosystem and precautionary methods, values of inclusivity and equity, and the need to give numerous benefits for ecosystems and communities for the protection and sustainable use of marine biodiversity. More than 90% of the planet's habitable space is found in the oceans, which cover 71% of its surface. They are home to both the biggest species that have ever existed on Earth and countless billions of the smallest [1].

Here, a shared conceptual framework on marine biodiversity is offered to make it easier to conduct an integrated evaluation of the state of the environment and put applicable laws into practise. We offer a context-driven, comprehensive perspective on biodiversity that makes it possible to choose the best assessment criteria and indicators. To protect biodiversity in the context of the sustainable management of human activities, policies and practises must be implemented and further developed [2].

A grouping of intricately linked ecosystem elements or features, marine biodiversity includes all levels of biological organisation, from genes to species to populations to ecosystems, and each level's diversity possesses both structural and functional characteristics. Additionally, the assessment of marine biodiversity or any of its constituent parts can be done at different spatial or temporal scales. It follows that a conceptual model of marine biodiversity and its interpretation depend on the questions being posed, the emphasis placed on the various components, and the knowledge and understanding already in hand, particularly with regard to the connectedness and feedbacks in the system [3].

The term "structural diversity" is also frequently used to describe genetic, species, and environmental variety. The number of fish species in the North Sea serves as an example of species diversity; genetic and ecosystem diversity, on the other hand, refer to the number of communities that live in various habitats and ecosystems [4].

The ratio of grazers to filter feeders in an ecosystem is an illustration of functional diversity. One of the key elements influencing an ecosystem's long-term stability and capacity to recover from large shocks is regarded to be functional diversity. Numerous layers of organization, such as genes, species, habitats, communities, and ecosystems, are included in the concept of biodiversity. While phyletic diversity is the most prevalent measure of taxonomic diversity, species diversity is also a widely used indicator of taxonomic diversity. Phyletic diversity refers to the variability among organisms' functional body designs. The Arthropoda phylum, which contains creatures like crabs, lobsters, and shrimp as marine animals as well as insects and spiders as terrestrial beings, is an illustration of a phylum [5].

CONCLUSION

The health of the seas and people are directly and indirectly impacted by a number of vital processes that marine organisms play a role in. It is clear that certain species and functional groups are integral to key ecological processes, and their extinction could have a severe impact on the ecosystem as a whole. We receive several benefits from the marine ecosystem, including the provision of food, the cycling of nutrients, the production of gas, and the control of the climate. We may understand the complete value of ecosystems and our overall dependence on those systems by considering the products and services they offer.

REFERENCES

1. Hatcher A, Bruce G. Coral reef primary productivity: A hierarchy of pattern and process. Trends Ecol Evol. 1990; 5(5): 149 –155.
2. Marubini F, Davies K. Nitrate increases zooxanthellae population density and reduces skeletogenesis in corals. Marine Biol. 1996; 127 (2): 319–328.
3. Corinne L, Quere A. Global carbon budget 2015. Earth Sys Sci Data. 2015; 7(2): 349-396.

Correspondence to: Le Herbon, Department of Terrestrial and Aquatic Wildlife, University of Veterinary Medicine Hannover, Hannover, Germany, E-mail: leherbon@gmail.com

Received: 06-Jul-2022, Manuscript No. JCZM-22-17688; **Editor assigned:** 11-Jul-2022, Pre QC No. JCZM-22-17688 (PQ); **Reviewed:** 25-Jul-2022, QC No. JCZM-22-17688; **Revised:** 01-Aug-2022, Manuscript No. JCZM-22-17688 (R); **Published:** 08-Aug-2022, DOI: 10.35248/2473-3350.22.25.512

Citation: Herbon L (2022) Importance of Marine Biodiversity and their Implications. J Coast Zone Manag. 25:512.

4. Mark S, Robert D. Brumbaugh E. Atlas of ocean wealth . The Nature Conser. 2016; 7(1):14.
5. Paulo A, Nunes A. The economics of marine ecosystems: Reconciling use and conservation of coastal and marine systems and the underlying natural capital. Environ Res Econ. 2013; 56(4): 459-465.