



Rescuing Coastal Areas from the Clutches of Large Marine Debris

Letch Lua*

Department of Culture and Sustainable Development, University of Athens, Athens, Greece

DESCRIPTION

The world's oceans, covering more than 70% of our planet, are a source of immense beauty, biodiversity, and resources. However, the increasing threat of marine macrolitter, particularly along coastlines, is casting a dark shadow on these pristine ecosystems. Marine macrolitter refers to large visible debris that finds its way into marine environments. This category includes items like plastics, abandoned fishing gear, wood, metal, and other substantial materials. Unlike microplastics, which are smaller and often invisible to the naked eye, macrolitter is easily detectable and has far-reaching ecological implications.

The primary sources of marine macrolitter are diverse, stemming from both land-based and marine activities. Improper waste disposal, inadequate recycling practices, and industrial runoff contribute significantly to the influx of debris into oceans. Additionally, maritime industries, such as shipping and fishing, are major contributors through the abandonment of fishing gear and accidental spills.

Marine macrolitter can be converted into marine wildlife. Large debris items, particularly plastics, can entangle marine animals, leading to injuries, deformities, or even death. Furthermore, the ingestion of these materials by marine species can cause internal injuries, blockages, and disrupt their digestive systems. The accumulation of macrolitter on coastlines can alter natural habitats. Debris such as plastic bottles, containers, and other materials can disrupt nesting sites for sea turtles and birds. The presence of non-biodegradable materials can also hinder the growth of coastal vegetation, impacting the overall biodiversity of these areas. Coastal communities heavily reliant on tourism and fisheries suffer economically due to the unsightly presence of marine macrolitter. Tourist attractions lose their charm, and the fishing industry faces challenges as debris interferes with fishing gear, causing damage and loss of valuable resources. The degradation of marine macrolitter over time can result in the release of harmful chemicals into the water, adversely affecting water quality. This has direct implications for both marine life and human populations, as contaminated water poses health risks and disrupts delicate ecological balances. The issue of

marine macrolitter is not confined to specific regions; it is a global challenge that demands immediate attention. Coastal areas around the world is occupied with the consequences of irresponsible waste disposal practices and the relentless flow of debris from various sources. The movement of ocean currents plays a significant role in transporting marine macrolitter across vast distances. Debris discarded in one part of the world can travel thousands of miles, impacting ecosystems far from its origin. This interconnectedness underscores the need for international collaboration in addressing the issue.

Certain areas, often referred to as "litter hotspots," experience a higher concentration of marine debris due to the convergence of ocean currents. The Great Pacific Garbage Patch, for instance, is a well-known hotspot where marine litter accumulates, highlighting the scale of the problem. The fight against marine macrolitter requires a concerted effort on a global scale. International agreements and collaborations are significant to developing and enforcing legislation aimed at curbing marine pollution. Efforts like the United Nations' Sustainable Development Goal 14, which focuses on conserving and sustainably using the oceans, emphasize the importance of international cooperation. Raising public awareness is paramount in changing behaviors and preventing marine litter at its source. Educational campaigns, community initiatives, and school programs can play a vital role in instilling a sense of responsibility for waste disposal and promoting sustainable practices. Advancements in technology can aid in the cleanup and prevention of marine macrolitter. Innovative solutions, such as ocean cleanup systems and autonomous vehicles designed to collect debris, show potential in addressing the magnitude of the issue. Adopting circular economy practices is essential in minimizing the generation of waste.

Encouraging recycling, reducing single-use plastics, and promoting the reuse of materials can contribute to a more sustainable and responsible approach to resource consumption. The pervasive presence of marine macrolitter on coastlines is an urgent global concern that demands immediate action. The environmental, economic, and societal consequences are far-reaching, impacting ecosystems, wildlife, and human communities

Correspondence to: Letch Lua, Department of Culture and Sustainable Development, University of Athens, Athens, Greece, E-mail: Letchlua@gmail.com

Received: 15-Jan-2024, Manuscript No. JARD-24-24844; **Editor assigned:** 17-Jan-2024, Pre QC No. JARD-24-24844 (PQ); **Reviewed:** 31-Jan-2024, QC No JARD-24-24844; **Revised:** 07-Feb-2024, Manuscript No. JARD-24-24844 (R); **Published:** 14-Feb-2024, DOI: 10.35248/2155-9546.24.15.840

Citation: Lua L (2024) Rescuing Coastal Areas from the Clutches of Large Marine Debris. J Aquac Res Dev. 15:840.

Copyright: © 2024 Lua L. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

alike. By fostering international collaboration, promoting public awareness, investing in innovative solutions, and embracing sustainable practices, we can collectively address this challenge

and prepare for towards cleaner and healthier oceans for future generations.