Waves of Change

CalsMUN 2024

Research Report

Forum: UNESCO

Issue: Addressing the Challenges of Protecting Marine World Heritage Sites

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Chair Introduction

“Hi, I’m Lucas. I am 15 years old and I come from Romania and Spain. One of my hobbies is water polo and this is my second time chairing.”

“Dear delegates, my name is Danyal Mohammed and I’ll be your deputy chair. I’m currently a student at the British School in the Netherlands in my final year of my GCSEs. I’ve attended 5 conferences as a delegate before and I’m excited to make CALSMUN my 6th conference and first chairing experience in MUN. I can’t wait to debate in January and I look forward to meeting you all!”

Introduction

UNESCO recognises 50 marine world heritage sites around the globe. Marine World Heritage sites are protected not only for their biodiversity and cultural significance but for their ability to slow the degradation of the ocean. Many of these are also key in fortifying ecosystems and combatting climate change, such as mangroves, which thrive in salty water and protect communities from extreme weather as well as capturing and storing carbon.

On the flip side, many of these sites are fragile and threatened by overfishing and climate change. These challenges can usually be considered either global and local in scope such as climate change and overfishing respectively. One can be solved with increased regulation and local initiatives while the other requires multilateral cooperation for countries to take action.

This research report will explore many these issues and explain solutions which have been considered in the past.

The committee

The United Nations Educational Scientific and Cultural Organisation (UNESCO) was formed 16 November 1945. Its ideals were shaped by the second world war and it aimed to provide security through shared appreciation and collaboration in education, culture, art and science. It has a history of working on issues such as racism and education and collaborating with organisations such as CERN and IB. The committee includes all member states excluding Israel and until recently the USA. It currently recognises 50 marine heritage sites of which 3 are considered world heritage in danger.

Definition of Key Terms

Marine World Heritage Site

The official UNESCO designation given to a specific marine area known for its exceptional cultural ecological or scientific importance and deemed to have outstanding universal value to humanity. This designation implies a commitment to safeguarding the resources present and addressing environmental and other threats. These sites include barrier reefs, atolls, islands and mangroves.

Blue Carbon

Blue Carbon refers to the carbon stored in coastal or marine ecosystems. Blue carbon environments are areas that can sequester and store large quantities of carbon, usually in mangroves, marshes and seagrass, located near the coast. According to the blue carbon initiative, mangrove deforestation accounts for up to 10% of global deforestation emissions despite covering just 0.7% of land globally. Similarly, seagrasses store about 10% of ocean carbon despite covering less than 0.2% of the ocean floor. UNESCO reports: “Despite covering less than 1% of the world’s oceans, World Heritage Marine Sites protect at least 21% of the global area of blue carbon ecosystems”.

Marine Protected Area (MPA)

Marine Protected Areas more generally refers to designated marine areas with varying levels of protection from human activities. Currently, only 3% of global ocean is protected significantly with a 10% target codified in the Sustainable Development Goals. The International Union for Conservation of Nature defines a protected area as: “A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.”

Overfishing

The depletion of fish stock in a body of water due to excessive fishing. The United Nations Food and Agriculture Organisation (FAO) estimates that 35% of the 500 fish stocks it monitors were overfished in 2022. Overfishing takes place when not enough adult fish are left to breed and the population collapses. This often happens as a result of climate change, rapid consumption, fishing subsidies, and illegal unregulated fishing. This may harm biodiversity and destroy local incomes in fishing based economies.

General Overview

Addressing the threats to marine is a multifaceted issue, comprising both grassroots and top down solutions. Marine World Heritage site are often vulnerable to climate change and pollution, despite the natural protection they afford and carbon they sequester. Another significant issue is that of excessive tourism, which has led most World Heritage Sites to impose visitor caps and enforce regulations strictly. These threats, along with many others, such as overfishing, acidification and invasive species are usually solved by NGOs and government taskforces, requiring funding and awareness.

Major Parties Involved

China

The People's Republic of China accounts for 35% of global fish and seafood production by volume. A 2013 study found that China substantially under-reports how much its fleets catch in distant water, estimating their catch at 4.6 million tonnes compared to their reported 368000 tonnes. This happened as China was experiencing a phenomenon where catch stagnates or even decreases despite increased fishing effort due to industrialisation. This led them to experiment and expand their distant water fleet, which to this day is considered to be rife with "illegal fishing" according to an EJF (Environmental Justice Foundation) report. Crucially for this topic, Chinese vessels, forming part of a fleet, were spotted in and around the Galapagos Island Exclusive Economic Zone (EEZ), which is important as the island is a recognised world heritage site

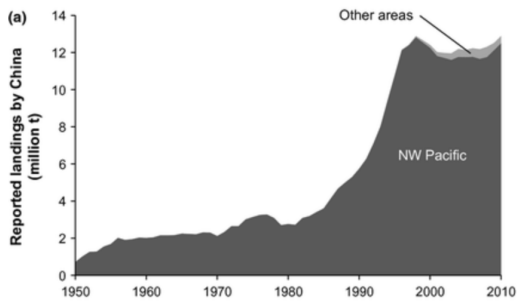

Figure 1 Chinese catch by region (million t)

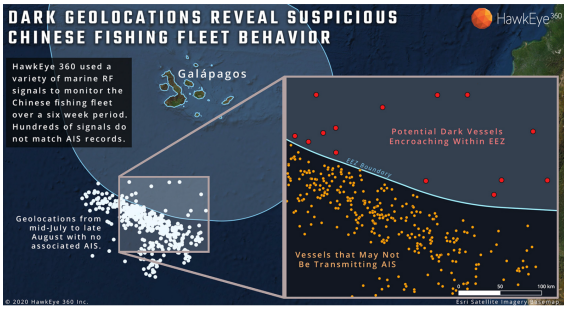

Figure 2 Chinese Fleets in Galapagos' EEZ

On the other hand, China has had significant success in managing its domestic MPAs according to Hakai magazine.

Local NGOs and Organisations

Local NGO's and specific organisations are often tasked with maintaining and educating the public on these sites. They advocate for protection of the area and endorse various projects to strengthen the environment.

Some NGOs tasked specifically with protecting the marine world heritage sites are the following, all of which work closely with their respective governments:

Association of Reef Keepers – Belize Barrier Reef

Coral Triangle Center - Komodo National Park

Great Barrier Reef Foundation - Great Barrier Reef

Galápagos Conservancy - Galápagos Islands

Seychelles Islands Foundation (SIF) - Aldabra Atoll

Wadden Sea Secretariat - Wadden Sea

Papahānaumokuākea Marine Debris Project – Papahānaumokuākea

Henderson Island Restoration Project - Henderson Island

IUCN (International Union for Conservation of Nature)

IUCN is a key partner of UNESCO in evaluating the natural values of proposed World Heritage Sites. It provides scientific expertise and advice on the conservation status of sites and helps develop conservation strategies.

Russia

Russia has high stakes in Arctic oil reserves and joined China in blocking the creation of a third Antarctic MPA.

Tourism Industry

The tourism industry, including tour operators and businesses operating near Marine World Heritage Sites, can influence conservation efforts. This is particularly relevant in the case of the Galapagos islands, which must closely regulate the amount of tourists each year and require an entrance fee of 100 dollars to finance conservation efforts. Visiting here is only allowed under a tour guide to minimise disturbance to the ecosystem.

Timeline of Key Events

1981:
Great Barrier Reef becomes first Marine World Heritage Site
1991:
The United Nations Convention on Biological Diversity (CBD) is adopted, recognising the importance of biodiversity conservation in natural environments.
1997:
Belize Barrier Reef becomes World Heritage Site
2002:
The World Summit on Sustainable Development in Johannesburg emphasizes the need for sustainable development, including the conservation of marine resources.
2004:
The Galápagos Islands become a World Heritage Site
2009:
The Wadden Sea, shared by Denmark, Germany, and the Netherlands, becomes a transboundary World Heritage Site.
2012:
The Pitons, Cirques and Remparts of Reunion Island is inscribed as a World Heritage Site.
2014:
The UNESCO Marine World Heritage Programme is launched to enhance conservation and management efforts for marine sites.

2016:
The Chagos Archipelago becomes a World Heritage Site.
2018:
The Sundarbans Mangrove Forest becomes a World Heritage Site.
2020:
The Henderson Island Restoration Project is initiated to address conservation challenges on Henderson Island.
2023:
Calls for third marine protected area in the Antarctic blocked by Russia and China

Previous attempts to solve the issue

Marine World Heritage Marine Managers Conference

This conference takes pace every three years to discuss the future challenges and prospects of their World Heritage Sites and

Tourism Management

Restricting and regulating the activities of tourists to minimise harm on the ecosystem.

A key example of this is the Ecuadorian Government's Galapagos National Park Directorate (GNPD), which publishes bilingual rules on visiting the site. These rules are enforced with fines, leading it to become one of the best regarded Marine World Heritage sites. They also enforce a strict visitor quota to minimise disturbance.

Multilateral Agreements

Sometimes multilateral agreements are necessary if there are several groups in the area.

This is the case in the Wadden Sea, which spans the Netherlands, Denmark and Germany. The sea is managed by the Common Wadden Sea Secretariat (CWSS), which supports and facilitates the Trilateral Wadden Sea Cooperation, based on the "Joint Declaration on the Protection of the Wadden Sea".

Environmental Management

Environmental management seeks to address the environmental threats facing a world heritage site such as pollution and climate change.

This usually falls in the hands of governmental organisations such as the Australian Great Barrier Reef Marine Park Authority (GBRMPA) which not only handles tourism regulation but supports community clean-ups and combats pollution.

Possible Solutions

As with the previous examples, solutions tend to be local in scope and centred on minimising disturbance to the ecosystem. Future solutions could be implemented through measures including but not limited to: addressing sources of pollution; regulating tourism; increasing the area of MPAs surrounding the site; and promoting education surround threats to the environment.

Solutions must take into account the cultural and economic significance of the zone as well as the ecological value of the biodiversity. They should work closely with local governments to encourage a grass-roots approach as well as national and international legislation.

Further Reading

https://www.thebluecarboninitiative.org/

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