The Sargasso Sea Commission: navigating into uncharted waters

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Science Day
Casablanca
16 March 2023

Joint Session of the London Convention/Protocol Scientific Groups (LC/SG 46 & LP/SG 17)

Today’s Presentation: Navigating into uncharted waters

Where is the Sargasso Sea? Why is it important?

The Sargasso Sea Commission – Origin and Mandate

The new GEF Financed Work Programme
Governance of the Sargasso Sea

Goverance Gaps
- Seabed minerals governed by International Seabed Authority (ISA) but no relevant regional organizations
- Vessel movement / discharges International Maritime Organization (IMO)

• International Maritime Organization (IMO)
  - Maritime transport and vessel source pollution - global competence
• International Seabed Authority (ISA)
  - Exploration for and exploitation of seabed minerals in ABNJ - global competence
• International Convention for the Conservation of Atlantic Tuna (ICCAT)
  - Regulation of fishing for tuna and tuna-like species - all of the Atlantic
• North-west Atlantic Fisheries Organization (NAFO)
  - Regulation of high seas and deep sea fishing activity - above 35°N
• Sargasso Sea Commission area of collaboration
  - Some of the high seas area of the North Atlantic Ocean - excluding EEZs of countries

"Encountered weed ... in some places so thick that it actually held back the ships..."
Columbus 28th September 1492
Unique open-ocean sargassum-based ecosystem. Mostly High Seas

Important for life history of many species (eels, turtles, tuna, billfish, sharks, etc.)

Sargassum Endemics

145 invertebrate species live in association with Sargassum
Nursery/Feeding area: eggs/juveniles of >80 fish species occur in

Iconic species
Global Connections

Aims of the Sargasso Sea project from 2010
(Led by the Government of Bermuda)
To build a network of international partners to:
* Achieve international recognition of the global importance of the Sargasso Sea
* Work with existing international and sectoral organisations to achieve better protection for the Sargasso Sea in accordance with the Law of the Sea Convention
* Use this experience as an indication of what is possible and not possible under current regime for ABNJ
The Hamilton Declaration
on Collaboration for the Conservation of the Sargasso Sea
(March 2014)

Dr. Sylvia Earle,
Sargasso Sea Commission Ambassador

Hamilton Declaration Signatories
- Azores
- Bahamas (2016)
- Bermuda
- British Virgin Islands (2016)
- Canada (2016)
- Cayman Islands (2017)
- Dominican Republic (2018)
- Monaco
- United Kingdom
- United States
- Netherlands, Bavaria, South Africa
- Turks and Caicos
- Trinidad and Tobago unable to attend but supportive

Observer Organisations
- ISA - International Seabed Authority Secretariat
- OSPAR (formerly Executive Secretary)
- Convention on Migratory Species Secretariat
- IUCN
- Inter-American Convention for the Conservation of Atlantic Sea Turtles

Meeting of Signatories
Meets every two months

Sargasso Sea
Commission
Stewardship Role.
Meets every two months.

Volunteers acting in personal capacity

Sargasso Sea
Secretariat
Small Permanent Body
Support Meeting of Signatories, works
Sargasso Sea Commission

Financial Mechanism
- 501(c)(3) in US
- Registered Charity in Bermuda

Hamilton Declaration Structure
Sargasso Sea Commission
engagement with international organizations

- United Nations
- Convention on Biological Diversity (CBD)
- International Commission for Conservation of Atlantic Tunas (ICCAT)
- International Maritime Organization (IMO)
- North-west Atlantic Fisheries Organization (NAFO)
- European Union
- Caribbean Community (CARICOM)
- Convention on Migratory Species (CMS)
- UNESCO World Heritage Convention
- IUCN
- IOC – OBIS
- IUCN
- International Cable Protection Committee (ICPC)
- Inter-American Convention for the Protection and Conservation of Sea Turtles
- Cartagena Convention - Caribbean Regional Sea
- Abidjan Convention - West African Regional Sea
- WECAFC

Collaborating partners

- Air Centre
- Andrew Stevenson
- Bermuda Institute of Ocean Sciences (BIOS)
- Bermuda Zoological Society
- Ciências – University of Lisboa
- Dalhousie University
- Duke University Marine Geospatial Ecology Laboratory
- Florida Atlantic University
- Global Fishing Watch
- Gallifrey Foundation
- Global Ocean Biodiversity Initiative (GOBI)
- Global Oceans
- Imperial College London
- Institute for Advanced Sustainability Studies (IASS)
- Institute for Sustainable Development and International Relations (IDDRI)
- International Cable Protection Committee (ICPC)
- International SeaKeepers Society
- International Union for the Conservation of Nature (IUCN)
- (WCPA)
- Look Bermuda
- Mare (Portugal)
- Marine & Environmental Law Institute, Dalhousie University
- Marine Biological Laboratory (MBL)
- Mission Blue/Sylvia Earle Alliance
- Nekton/Code Blue Foundation
- Nonsuch Expeditions
- Optical Oceanography Lab, College of Marine Science, University of South Florida
- Ocean Foundation
- Plymouth Marine Laboratory (PML)
- Sea Education Association
- The Ocean Foundation
- University of the Bahamas
- University of Brest (UBO)
- University of Exeter Global Systems Institute
- University of South Florida College of Marine Science
- University of Central Florida Marine Turtle Group
- University of Florida Marine Turtle Group
- University of Georgia Marine Turtle Research Lab
- University of Georgia Marine Science
- University of Miami Marine Turtle Group
- University of Montpellier
- World Commission on Protected Areas

10/07/2023
Agreed Work Programme

1. International Recognition of the Ecological Importance of the Sargasso Sea
2. Fisheries and Fisheries Habitat Conservation
3. Impacts from International Shipping
4. Impacts to the Seafloor and Seabed
5. Conservation of Migratory Species
6. Defining Role in Data and Information Management

Strengthening the stewardship of an economically and biologically significant high seas area – the Sargasso Sea

Inception Workshop
Per Zoom 15 December 2020

2022 GEF Financed Project

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Inception Workshop
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Key Components

- 4 year project for US $3 million
- Child Project under FAO Common Ocean Program
- UNDP Implementing/UNESCO IOC Executing agency

1. An Ecosystem Diagnostic Analysis (EDA) for the Sargasso Sea
   Baseline for monitoring adaptive management/stewardship
2. A road-map and budget for the adoption of an Ecosystem Based Approach to governance and conservation
3. Strategic Action Programme defining the management or stewardship measures
4. Knowledge Management, Monitoring and Evaluation
First GEF Financed High Seas Ecosystem Diagnostic

IMPLEMENTING PARTNERS
- NASA COVERAGE Project
  Sargasso Sea is PILOT site for remote sensing and "Big Data" processing
- Duke University Marine Geospatial Ecology Laboratory
  Developing Portal for human impacts access to ecosystem data for assessment and governance
- Imperial College Centre for Environmental Policy
  DIPSIR
- Bermuda Institute of Ocean Science
  State of the art Oceanography of the Sargasso Sea
  World’s longest time series of ocean monitoring

World Ocean Assessments 2016 and 2021
The only named ecosystem in the United Nations Global Reporting and Assessment of the State of the Marine Environment

Chapter 7Q: Sargasso Sea

The Second World Ocean Assessment
WORLD OCEAN ASSESSMENT II
Volume I
NASA COVERAGE project

- In-kind partnership project to develop initial satellite map product for Sargasso Sea
- 2017 Approved by Committee on Earth Observation Satellites (CEOS)
- Future phases other data providers on tagged animals, fishing and shipping information

Deliverable 1 Progress
Sargassum Remote Sensing

Existing Indices
- Maximum Chlorophyll Index (MCI) or Alternative Floating Algae Index (AFAl)
- Gaps in time and spatial coverage

Maximum Chlorophyll Index (MCI) – 2019 sum
Sentinel 3A/3B OLCI
NOAA Ocean Watch

Alternative Floating Algae Index (AFAl)
MODIS
NASA COVERAGE / NOAA Ocean Watch
Going forward…
Going boldly where no project has gone before…

- Piloting use of Big Data and AI for Ocean Governance
- First High Seas Ecosystem Diagnostic Analysis financed by Global Environment Facility (GEF)
- First Strategic Action Programme for a High Seas Ecosystem
- With accompanying conservation measures
- Hope to be the first to propose a High Sea PSSA to IMO – look forward to collaboration with IMO colleagues

Thank you for your attention
With thanks to Fae Sapsford for technical help