

Lessons from the Sargasso Sea

Challenges to the conservation and sustainable use
of marine biodiversity beyond national jurisdiction

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SINCE 2010 THE SARGASSO SEA PROJECT— LED BY the Government of Bermuda — has been working with a network of international partners to: **1** achieve recognition of the global importance of the Sargasso Sea; **2** pursue better protection for the Sargasso Sea by working through existing international and sectoral organizations in accordance with the Law of the Sea Convention (LOSC); and **3** use this experience as a model for achieving protective status for areas beyond national jurisdiction (ABNJ) elsewhere.

While the Sargasso Sea Project has succeeded in gaining wide-spread recognition for the Sargasso Sea’s significance, the primary legally binding protective measure secured after six years of extensive work has been a closure of several seamounts to deep sea bottom fishing by the North-west Atlantic Fisheries Organization (NAFO). What we have learned is that the lack of common principles, common criteria and common evidentiary standards for conservation measures has hindered broader efforts for comprehensive management.

The Sargasso Sea is located within the North Atlantic Subtropical Gyre, bounded on all sides by major ocean currents. Its core area covers approximately 2 million square nautical miles around the islands of Bermuda, most of which is beyond the national jurisdiction of any state.

The Sargasso Sea is named after its floating Sargassum seaweed (*Sargassum natans* and *S. fluitans*) that supports a diverse and productive ocean ecosystem. It is also on the migration route of many species, including sharks and cetaceans. It is the only place in the world where the endangered American eel (*Anguilla rostrata*), and critically endangered European eel (*Anguilla anguilla*) spawn. Surrounding the archipelago of Bermuda and within the area of the Sargasso Sea lies an abyssal plain some 4,000 metres deep, with three groups of seamounts that are 70 to 90 million years old. The Sargasso Sea was the only named ecosystem to merit a chapter of its own in the *First World Ocean Assessment*.

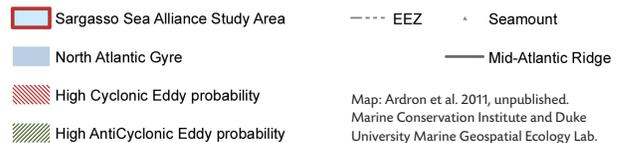
In March 2014, representatives from eleven governments came together in Bermuda to express support for the Sargasso Sea initiative. This resulted in the *Hamilton Declaration on Collaboration for the Conservation of the Sargasso Sea*. The Declaration establishes a non-binding framework for its signatory governments to work through existing international and industry bodies to minimize the adverse effects of human activities.

The Sargasso Sea Commission was established, under the Declaration, to “exercise a stewardship role for the Sargasso Sea and keep its health, productivity and resilience under continual review.” The Commission is composed of six distinguished scientists and other persons of international repute, serving in their personal capacity.

In 2012 the Sargasso Sea was described as an Ecologically or Biologically Significant Marine Area (EBSA) by the Parties to the Convention on Biological Diversity (CBD), based upon the recommendations of a regional scientific expert workshop. The Project has used the EBSA description as a reference to seek appropriate protection measures within the relevant existing international and regional sectoral organizations. These include the International Maritime Organization for shipping-related threats; the International Commission for the Conservation of Atlantic Tunas (ICCAT) for tuna-and tuna-like species; NAFO for deep sea bottom fisheries in the small area of the Sargasso Sea above 35°N; and the International Seabed Authority (ISA) for seabed mining. Collaboration has been sought with other regional and likeminded bodies as well as cross cutting organisations such as the Convention on Migratory Species. At present there is no fisheries regulatory authority for non-tuna like species in the majority of the



The Sargasso Sea



Sargasso Sea, and the closest regional seas programme (for the Wider Caribbean Region) does not extend as far north as Bermuda and excludes ABNJ.

Lessons Learned

After six years of work, it is clear why no one else has undertaken such an effort for a marine ecosystem beyond national jurisdiction without the direct support of a regional organization – it is not an easy task. Despite the plethora of international organisations with an interest in ABNJ, there are only a handful with actual management competence in the Sargasso Sea area and none with a core focus on comprehensive conservation of marine biodiversity or ecosystems. The Sargasso Sea Project thus provides an interesting insight into the way in which the current system of high seas governance operates.

Each sectoral regime with competence over activities in the Sargasso Sea study area has its own distinctive protection mechanisms and each assesses differently the factors that need to be taken into account. The result? A patchwork of

sectoral area-based management tools designed to protect specific marine areas from sectorally specific threats. For example, the IMO has the power to adopt MARPOL Special Areas and Particularly Sensitive Sea Areas (PSSAs) to limit some shipping impacts, non-tuna RFMOs have the power to protect vulnerable deep seabed ecosystems, and the ISA has designated nine no-mining “Areas of Particular Environmental Interest” in the Clarion Clipperton Zone in the Pacific Ocean based on design principles for representative networks of marine protected areas, though not yet in the Atlantic.

Each of these sectoral approaches has value, but each is developed and assessed by its own criteria and scientific evidentiary demands. None were developed with any reference to the work of other sectoral bodies and no mechanism exists for coordinating between the various sectors. Moreover, regulation within sectors may be inconsistent both globally and regionally. For example, pressure through UNGA resolutions served to put biodiversity conservation squarely on the agenda of RFMOs, such as NAFO, responsible for managing deep sea bottom fishing on the high seas, but for



Key Achievements

- 2012** Sargasso Sea described as an EBSA by the Parties to the CBD
- 2013** ICCAT Science body recommendation of the Sargasso Sea as case study for an ecosystem-based approach to fisheries management
- 2014** Signing of the Hamilton Declaration by 5 (now 6) governments
- 2014** Establishment of Sargasso Sea Commission
- 2014** Listing of European Eel under Appendix II of CMS
- 2016** NAFO closures of the Corner Rise and New England Seamount areas in the Sargasso Sea to bottom fishing

other forms of fishing, despite their potential for significant biodiversity impacts, few closed areas have been adopted for biodiversity purposes. On top of this, there is no mechanism for consideration of cumulative impacts from different sectors or the aggravating factor of climate change.

In addition, there is little evidence that a number of basic precepts included within key international legal and policy instruments are being effectively applied by most international sectoral bodies, including the ecosystem approach. ICCAT, for example, has declined to date to follow the advice of its ecosystem sub-committee that the Sargasso Sea be used as a case study for an ecosystem-based approach to fisheries management.

More fundamental is the apparent reluctance to apply a precautionary approach. This approach requires that when the risks are considered to be significant action should be taken in advance of convincing scientific evidence. All too often a precautionary approach is not taken by sectoral organisations in relation to activities on the high seas—where scientific evidence is often sparse. The IMO PSSA Guidelines, for example, say that it is “helpful” to have “...any evidence that international shipping activities are causing damage and whether damage is of a recurring or cumulative nature.” In practice, this is taken by many influential delegations at IMO to be an evidentiary requirement.

The concept, developed by the CBD, of the science-driven description of certain marine areas as “ecologically or

biologically significant” does in theory have the potential to act as an unifying concept, which each sectoral regime could recognise and utilise. Unfortunately, the early experience in relation to the Sargasso Sea is that—with the limited exceptions of NAFO and the Western Central Atlantic Fishery Commission (currently without management authority)—EBSAs have not as yet generated action within the various sectoral organisations.

Elements of the new treaty under discussion such as the reaffirmation of basic principles like the precautionary approach and ecosystem-based management as well as elaboration of mechanisms for area-based management tools including marine protected areas; environmental impact assessments and strategic environmental assessments, could provide important means to safeguard this iconic ecosystem. Moreover, the Sargasso Sea would benefit from efforts to encourage collaborative research ventures, including with developing country partners, to enhance capacity, grant easier access to marine technologies and enable present and future generations to benefit from the continued health, productivity and resilience of the Sargasso Sea ecosystem.

The findings of the Sargasso Sea Project to date reinforce the view that a new international legally binding instrument on the conservation and sustainable use of marine biodiversity in ABNJ provides a critical opportunity to build on the LOSC regime to enable a more holistic approach to ocean governance for the Sargasso Sea and other regions in ABNJ.

For further details of the work of the Sargasso Sea Commission contact Dr David Freestone, Executive Secretary (dfreestone@sargassoseacommission.org) or Faith Bulger, Programme Officer (fbulger@sargassoseacommission.org)

PHOTO CREDITS: Sargasso fish (cover) JP Rouja LookBermuda, humpback whale (page 2) Andrew Stevenson, Sargasso Sea (above) Sylvia Earle



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