

# Biodiversity, Key Pressures and Potential Conservation Measures in Areas Beyond National Jurisdiction of the Southeast Atlantic

The ocean covers over 70% of the planet and is vital for all life. The ocean, including areas beyond national jurisdiction (ABNJ) regulates the global climate, hosts immense biodiversity, and provides essential resources and ecosystem services, supporting livelihoods and socio-economic activities.

ABNJ and coastal waters are ecologically connected through migratory and circulatory connectivity, whereby disturbances to marine biodiversity have effects far beyond the area of impact. This connectivity is essential to healthy marine ecosystems.

The environmental impacts of socio-economic activities in the ocean, including in ABNJ, are especially critical for a range of countries, where large parts of the population rely on marine resources for food security and their livelihoods. Connectivity must therefore be recognised in governance approaches and there is an urgent demand to rethink how to effectively conserve and sustainably manage the ocean as a whole.

Measures to support conservation efforts must address cumulative pressures on the ocean, including climate change, as well as connectivity to achieve biodiversity protection. Moreover, the complexity and dynamic nature of the ocean, including in ABNJ, requires that conservation efforts acknowledge uncertainty, include options to address it or adapt swiftly to new scientific information, and consider the three-dimensional space of the ocean. Integrated ocean management is increasingly important to advance the conservation and sustainable use of marine biodiversity in ABNJ.

There is considerable information available about the key components of biodiversity in the Southeast Atlantic as well as pressures stemming from socio-economic activities. There exists a range of measures to support conservation efforts available for the region to achieve biodiversity protection.

## **Linking biodiversity components and key pressures in the Southeast Atlantic to potential measures to support conservation efforts**

### **Seabed habitats (benthic)**



**Hydrothermal vents** located along the Mid-Atlantic Ridge; **Seamounts** that are ubiquitous (25% of the world's seamounts\*); and **Abyssal Plains** (incl. the Cape Verde and Angola Plains)

\* FAO zones 34 and 47

#### **Key Pressures:**

- Physical disturbance and destruction of the seabed caused by human activities such as fishing (bottom trawling and setting of traps/pots), offshore prospecting and mining. Climate change affects the physical-chemical environment of benthic habitats and species distribution.

#### **Potential Measures to Support Conservation Efforts:**

- Vulnerable Marine Ecosystems
- Fisheries measures (including gear restrictions)
- Restrictions on deep sea mining or Areas of Particular Environmental Interest
- Marine Protected Areas (MPAs) (incl. networks)
- Climate change mitigation measures
- Waste management from land-based sources and abandoned fishing gear

The Southeast Atlantic comprises diverse oceanographic systems (**North Atlantic Subtropical Gyre, Eastern Tropical Atlantic, South Atlantic Subtropical Gyre, Sub Antarctic Atlantic system**) translate into food web structures, fisheries productivity, and habitats for megafauna.

#### **Key Pressures:**

- Pollution stems from maritime transport, offshore prospecting and mining activities, land-based activities and dumping of waste. Climate change may change trophic webs in the sea, species and communities may shift to new areas (habitats and feeding grounds are affected) and the risk of invasive species increases.

#### **Potential Measures to Support Conservation Efforts:**

- Preventing discharges and pollution from ships
- Regulations on chemical use
- Particularly Sensitive Sea Areas (PSSAs)
- Climate change mitigation measures
- Waste management from land-based sources and minimising ghost gear
- Ballast water management implementation
- Adaptive management approaches
- MPAs (incl. networks)

### **Water column habitats (pelagic)**



## Fish



Primary species targeted by fisheries in the Southeast Atlantic include **tuna, shark and sailfish /swordfish.**

### Key Pressures:

- **Commercial fishing** is the most significant activity in terms of volume of fish and other non-fish species extracted in ABNJ.
- **Spatial distribution, and possibly abundance of targeted species is expected to change due to impacts from climate change.**

### Potential Measures to Support Conservation Efforts:

- Fishing measures incl. bycatch mitigation and Total Allowable Catch
- Regulations on chemical use ➤ Preventing discharges and pollution from ships
- Climate change mitigation measures ➤ Ecosystem approach to fisheries
- Waste management from land-based sources ➤ MPAs (incl. networks and other Area Based Management Tools (ABMTs))

The Southeast Atlantic\* has **approximately 37 species of marine mammals** (4 Endangered, 3 Vulnerable and 17 Data Deficient)\*\* and **5 species of turtles** (1 Critically Endangered, 1 Endangered and 3 Vulnerable)\*\*.

\* FAO zones 34 and 47 \*\* according to the categorizations of the International Union for the Conservation of Nature (IUCN)

### Key Pressures:

- Threats in ABNJ are interaction with **commercial fisheries** (bycatch and entanglement, competition for food), **marine pollution, ship strikes, underwater noise.**
- **Spatial distribution, and possibly abundance of marine mammals and turtles is expected to change due to impacts from climate change.**

### Potential Measures to Support Conservation Efforts:

- Fishing measures incl. bycatch mitigation and removal of ghost gear ➤ PSSAs
- MPAs (incl. networks) ➤ Regulation of navigation, e.g., routes, noise restrictions
- Marine mammal observers on seismic vessels ➤ Climate change mitigation measures
- Preventing discharges and pollution from ships ➤ Regulations on chemical use
- Waste management from land-based sources ➤ Ecosystem approach to fisheries

## Marine Mammals & Turtles



## Seabirds



The Southeast Atlantic includes numerous types of seabirds (e.g., Tropicbirds (2 species), Boobies (3 species), Frigatebirds (2 species, incl. the single-island endemic and eponymous Ascension Frigatebird), Terns (>10 species), etc.

### Key Pressures:

- Threats are interaction with **commercial fisheries** (bycatch and entanglement, competition for food), **climate change impacts on large-scale ocean productivity and circulation patterns and disruption to migration systems or food availability** (changes in distribution from climate change or depletion due to overfishing).

### Potential Measures to Support Conservation Efforts:

- Bycatch mitigation measures ➤ MPAs (incl. networks and other ABMTs)
- Climate change mitigation measures ➤ Ecosystem approach to fisheries

The **STRONG High Seas** project, coordinated by the Institute for Advanced Sustainability Studies (IASS) and implemented together with six partners based in Europe, South America, and Africa, and its regional partners the Secretariat of the Permanent Commission for the South Pacific (CPPS) and the Abidjan Convention Secretariat, is a five-year project that aims to strengthen regional ocean governance for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction.

For more information visit: [www.prog-ocean.org/our-work/strong-high-seas/](http://www.prog-ocean.org/our-work/strong-high-seas/)

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