



SARGASSO

THE SEA OF OPPORTUNITY FOR OCEAN PROTECTION



GREENPEACE

**PROTECT
THE OCEANS**

ACKNOWLEDGEMENTS

Greenpeace would like to thank all the participants from across Bermuda and beyond who contributed their time and expertise to our Sargasso Sea policy workshop, while Greenpeace's ship the Arctic Sunrise was moored in Bermuda in May 2024.

The workshop focused on threats to the Sargasso Sea and the various impacts that a high seas ocean sanctuary would have on Bermuda. The findings in this report owe a great deal to the reflections and knowledge contributed by this group.



Participants of ocean sanctuary workshop holding banners
© Tavish Campbell / Greenpeace

CONTENTS

Acknowledgements	2
Foreword	5
Executive summary	6
Introduction.....	8
The global importance of the Sargasso Sea.....	11
Safeguarding the Sargasso Sea: understanding the threats.....	14
Bermuda: championing a Sargasso Sea Ocean Sanctuary.....	20
The voyage ahead.....	23
Endnotes	26



FOREWORD

by Noelle Young

*Sustainability Solutionist and Youth
Delegate from Bermuda*

"In May 2024, I joined a Greenpeace voyage through the heart of the Sargasso Sea – a journey that deeply reminded me of what we are fighting for: the preservation of our oceans and the vital ecosystems within it, natural resources upon which my beloved Bermuda heavily depends.

The Sargasso Sea is a stunning ecosystem. I had the opportunity to listen to the mesmerising songs of whales, the chatter of dolphins, and the rhythmic pops of organisms living in the sargassum floating past Greenpeace's ship, the Arctic Sunrise.

As a mixed-race, multicultural female youth delegate with a strong family history in advocacy, my journey was both a badge of honour and a profound responsibility. With the Greenpeace crew I experienced the power of global cooperation, working with individuals from 18 different nationalities who had come together in support of protecting the Sargasso Sea.

No small drop in the ocean, a Sargasso Sea Ocean Sanctuary would cover 1.5% of the world's high seas. Protecting these enormous areas has previously been almost impossible, but the 2023 agreement of the UN Global Ocean Treaty has opened a path to safeguarding the unique environment of the Sargasso Sea for future generations. Countries around the world need to ratify the treaty in time for the first Conference of

Parties for the Ocean. This is likely to take place in 2026, so work must begin now on shaping a proposal for a Sargasso Sea Ocean Sanctuary.

Our island rests within the heart of the Sargasso Sea. Bermuda is small, but possesses a mighty collective voice and we must boldly use it to support the preservation of our environment. Bermuda has already led pioneering efforts to conserve the Sargasso Sea, aiming to protect the species that inhabit and migrate through it. We must now expand and continue this work in partnership with the UK government for the long term, ensuring the Sargasso Sea is preserved for all future generations.

Together, Bermuda and the UK can be global leaders in the push to protect at least 30% of the world's oceans by 2030, with the Sargasso Sea prioritised as a key inaugural site. I will admit: the challenge is immense, but so should be our determination. The time for enduring is over. Now is the time for empowering, leading and protecting."

EXECUTIVE SUMMARY

Hailed as the greatest ever victory for conservation, the Global Ocean Treaty – agreed at the UN in March 2023 – has made genuine protection of the high seas more possible than ever before. The UK has a unique role to play in global ocean protection and needs to grasp this opportunity now.

The high seas are the region beyond national jurisdiction, which make up nearly two thirds of the world's ocean and have historically had very limited conservation governance. Creating a network of ocean sanctuaries on the high seas is a crucial factor in reaching the global target of protecting at least 30% of the ocean by 2030. And there is no time to waste: less than 1% of the high seas is currently fully protected and at the current rate of progress, the global goal to protect 30% of the world's ocean will not be reached until the next century. A Sargasso Sea Ocean Sanctuary should be one of the first sites designated under this treaty

Situated in the North Atlantic, the Sargasso is a sprawling and complicated ecosystem that covers 4 million square kilometres. Large mats of shimmering sargassum seaweed carpet the water's surface and create the foundation for hundreds of highly diverse marine species to feed,

breed and thrive. It provides a crucial stop on the migration paths of whales and turtles.

At the centre of the Sargasso Sea is the island of Bermuda, a UK Overseas Territory. Bermuda has a strong connection to the health of the Sargasso, and this is reflected in the leading role it has taken in promoting the Sea's conservation. The potential environmental, social and economic benefits to Bermuda of a Sargasso Sea Ocean Sanctuary are clear, but as an Overseas Territory, Bermuda doesn't have a direct voice in the UN. Therefore, the UK must take the cause forward on the global stage.

The details of how the Global Ocean Treaty will be implemented will be decided in the next two years. This provides a space for Bermuda, the UK and their allies to set the agenda now and implement a Treaty that will produce the conservation gains needed in this time of biodiversity and climate crises.



A piece of plastic floating in a mat of sargassum © Deirdre Leowinata / Greenpeace

To deliver protection of at least 30% of the world's ocean by 2030 – also known as 30x30 – Greenpeace has four clear recommendations to UK policy makers:

1 Ensure the UK is one of the first to ratify:

The UK must lead the way and support other nations in ratifying the Global Ocean Treaty by early 2025 for it to come into force later in the same year. The Treaty will come into force 120 days after 60 countries have ratified. The EU and its 27 member states have stated they expect to ratify the Treaty in time for the UN Ocean Conference in June 2025.

2 Begin the process of drafting the sanctuary proposal now:

The UK and Bermuda must convene other potential champion governments to begin drafting an ocean sanctuary proposal for the first Ocean Treaty COP, which will take place within one year of the Treaty coming into force. This should be the first of a series of meetings. Relevant NGOs, fishers and community groups need to be involved from the beginning, and the proceedings and decision-making process should be transparent.

3 Embed local expertise:

Bermuda should be appointed as a permanent member of any governing board overseeing the Sargasso Sea sanctuary, to help ensure that the island's welfare is consistently represented in all decision-making processes.

4 Champion a wider network of ocean sanctuaries:

The Sargasso Sea will be part of a wider network of ocean sanctuaries that span the high seas. The UK must support other sites as well as the Sargasso Sea for early designation to enable the delivery of 30x30.



INTRODUCTION

“A STUNNING ECOSYSTEM”

Stretching across 4 million square km of the North Atlantic Ocean, the Sargasso Sea is a unique ecosystem.¹ The only sea in the world that isn't bordered by land, it is instead surrounded by the great ocean currents of the North Atlantic Gyre.

Much of the Sargasso Sea is on the high seas, the areas beyond the 200 nautical mile limits of national jurisdiction that have historically had very limited conservation governance. That situation changed in March 2023 when the Global Ocean Treaty was agreed at the UN.

The Sargasso Sea takes its name from the huge quantities of sargassum seaweed which form mats so thick and vast that they create a rich and complex habitat on the surface of the open ocean, far from land in waters that are kilometres deep. Biodiversity ranging from tiny endemic crabs to enormous whales live in the Sargasso Sea, but the ecosystem is under threat from overfishing, climate change and pollution.

“VOYAGE THROUGH THE HEART OF THE SARGASSO SEA”

In May 2024, the Greenpeace Arctic Sunrise sailed to the island of Bermuda, nestled at the heart of the Sargasso Sea. The aim of the voyage was to highlight the beauty, uniqueness and global importance of the Sargasso and to champion its protection for future generations as part of a global network of ocean sanctuaries. While at sea, scientists documented the extraordinary flora and fauna, and the crew witnessed pods of sperm and short-finned pilot whales breaching the surface. Sadly, the large amount of plastic waste and remnants of industrial fishing gear that the team found drifting through the area were just as evident.

“A MIGHTY COLLECTIVE VOICE”

The most important part of the ship's mission was engaging with communities on Bermuda itself. Bermuda is a UK Overseas Territory and is already a champion for the conservation of the Sargasso Sea. A founding member and leader of the Sargasso Sea Commission, the Commission's founding document – the Hamilton Declaration – was signed in Bermuda in 2014, which brought together governments to “exercise a stewardship role for the Sargasso Sea and keep its health, productivity and resilience under continual review.”

While in Bermuda, Greenpeace's team had hundreds of conversations with the Bermudian public about ocean conservation and the Sargasso Sea. The commitment to protecting the ocean was clear and there is a strong drive to designate a Sargasso Sea Ocean Sanctuary, from conservationists, to fishers, to the Bermudian government.

As an Overseas Territory, Bermuda doesn't have a direct voice at the UN, and its drive to conserve the Sargasso Sea must be championed by the UK. The UK was a strong and positive voice in the negotiations for the Global Ocean Treaty, but has yet to ratify it with domestic legislation. The treaty won't enter into force until 60 countries have ratified, so the UK and other countries need to act swiftly so that the first Ocean Conference of the Parties (COP) can take place in 2026, and be ready to consider the very first high seas ocean sanctuary proposals.

Overleaf: Arctic Sunrise in the Sargasso Sea with Sargassum in the foreground © Tavish Campbell / Greenpeace

Also known as the High Seas Treaty, the Global Ocean Treaty has been hailed as the greatest ever victory for conservation, as it provides a framework for conserving the waters that make up 61% of the world's ocean. One of its key provisions is for the creation of marine protected areas, also known as ocean sanctuaries.



“NOW IS THE TIME”

2030 is fast approaching so time is running out to reach the 30x30 target set out in the Kunming-Montreal Agreement. If we are to achieve this global ambition of protecting at least 30% of the world's ocean by 2030, the work has to begin now. The UK must help prepare the proposal for an ocean sanctuary in the Sargasso Sea, so it can be among the first of the new high seas sanctuaries and get the protection it needs. Bermuda has a singular connection with the Sargasso Sea, and this should be reflected in the development of the ocean sanctuary. Bermudian Sustainability Solutionist and Youth Delegate, Noelle Young, has put forward a clear proposal for Bermuda to be appointed as a permanent member of any governing board overseeing the Sargasso Sea sanctuary, to help ensure that the island's welfare is consistently represented in all decision-making processes.

Achieving a Sargasso Sea Ocean Sanctuary in the next few years will require the UK and Bermuda to build a comprehensive ecological case for protection, map out a regulatory model, and gather a wide coalition of like-minded countries and non-governmental organisations for negotiations at the Ocean COP. This is an ambitious undertaking, but eminently achievable.

This report makes clear what is at stake in the Sargasso Sea and the threats it faces, as well as the support in Bermuda for its safeguarding and the steps the UK and other governments need to take to secure its future.



Aerial view of Arctic Sunrise in the Sargasso Sea © Tavish Campbell / Greenpeace

THE GLOBAL IMPORTANCE OF THE SARGASSO SEA

INCREDIBLE BIODIVERSITY

The Sargasso Sea plays host to a startling range of biodiversity. It takes its name from sargassum, a type of seaweed that is able to grow without being attached to the seafloor or another hard surface. It can be found throughout the central Atlantic, and as it drifts north on the Gulf Stream out of the Gulf of Mexico and up the US East Coast, some of it breaks off in eddies and becomes trapped in the subtropical North-Atlantic gyre.² There, the relatively weak currents present in the Sargasso Sea preserve millions of sargassum rafts over a vast area. Two species of sargassum are found in abundance: *Sargassum fluitans* and *Sargassum natans*.

The Sargasso Sea is the only place where stable agglomerations of sargassum grow in the true open ocean, making it a unique ecosystem.^{3,4} The sargassum mats allow a much more complex ecology to flourish at the sea surface than is typically found on the high seas. There are at least ten species that have evolved over time to become perfectly suited to life among the rafts and are endemic to sargassum.

Hundreds of other species have come to rely on the health of the Sargasso's unique environment to sustain them during breeding, as juveniles, and on long migration routes. Juvenile swordfish, jacks and dolphinfish make use of the shelter provided by the sargassum rafts to protect themselves through the early stages of life and the Sargasso Sea's location places it on the migration paths of humpback whales and sperm whales.⁵ In total, 30 species of dolphins and whales migrate through, or live amongst, the sargassum.



The sargassum crab (pictured) and sargassum angler fish have developed camouflage that allows them to hide among the seaweed fronds while they wait for their prey © Bryan Lisinsky / Greenpeace



Humpback whale during voyage to Sargasso Sea © Deirdre Leowinata / Greenpeace

A LIFE RAFT FOR THREATENED SPECIES

Many of the creatures that dwell in the Sargasso Sea are threatened with extinction. Critically endangered hawksbill and Kemp's ridley turtles, together with green and loggerhead turtles, are highly dependent on the Sargasso Sea for sustenance and as nursery grounds for their young.^{6,7,8} Bermudan petrels, also known as cahows, traverse an enormous range between Canada and Ireland, and arrive in Bermuda in an emaciated state. They then use the rich schools of small fish, squid and shrimp in the Sargasso to put on weight and breed. Cahows were thought to be extinct until 18 breeding pairs were discovered on Nonsuch Island in Bermuda in 1951 and diligent Bermudian conservation efforts have led to a strong recovery.⁹

Perhaps the most remarkable of all the residents of the Sargasso Sea are the European and American eels. Both these species spend their adult lives in freshwater streams and rivers in Europe and North America before migrating thousands of kilometres to spawn in the Sargasso Sea.¹⁰ Fishing, pollution and the destruction of their freshwater habitat has led to a severe decline in eel populations, and eel larvae are sensitive to the changes in ocean conditions in the Sargasso Sea.¹¹

GLOBAL IMPACT

Beneath the surface, the entire water column in the Sargasso Sea is rich with life. There are many seamounts dotted throughout the area, home to deep-water corals and sponges. Sargassum itself usually lives for about a year, before dying and sinking into the depths. It is thought that this provides an important source of plant matter to the abyssal seafloor ecosystem which covers most of the Sargasso Sea.¹²

The Sargasso Sea releases carbon during the summer but is a strong carbon sink in the winter, and is estimated to make up a significant proportion of the North Atlantic carbon sink.¹³ Sinking sargassum contributes to the carbon sequestration potential of the area. Furthermore, the Sargasso Sea is an unusually productive zone at the microbial level, generating a disproportionately large amount of the world's oxygen.¹⁴

The unique and complex biology of the Sargasso Sea is interconnected with ecosystems far removed from the North Atlantic Gyre. As a location for spawning grounds and migration pathways, a haven for juvenile fish and turtles, and as a generator of massive carbon sequestration and oxygen production, its impact is vital around the world.



Green sea turtle in the Sargasso Sea © Bryan Lisinsky / Greenpeace

Two seabird conservationists from the Bermudan Audubon Society,¹⁵ Erich Hetzel and Paul Watson, joined the scientists and campaigners on board the Arctic Sunrise to carry out seabird observation:

As the Greenpeace ship sailed the Sargasso Sea, they recorded 142 individual birds from 19 different species, including Arctic terns, south polar skuas and white-tailed tropicbirds.



They noted that the 'significance of the Sargasso Sea to pelagic seabirds cannot be overstated', since the sargassum mats provide foraging opportunities, and migrating seabirds depend on the food available in the Sargasso as they journey north and south. However, the large amounts of plastic pulled from the water and the relatively low numbers of birds observed compared to reports from previous years were hugely concerning.

SAFEGUARDING THE SARGASSO SEA: UNDERSTANDING THE THREATS

The Sargasso Sea's remote location on the high seas doesn't save it from exposure to the key threats facing the global ocean: overfishing, climate change and pollution.

OVERFISHING

On the high seas section of the Sargasso Sea outside Bermuda's waters, vessels from distant water fishing nations heavily employ drifting longlines to catch tuna and billfish. Drifting longlines can be up to 100km long and kill high levels of marine mammals, turtles, seabirds and sharks, all of which are found in abundance in the Sargasso Sea. An analysis by Greenpeace of data from Global Fishing Watch showed that on the high seas of the Sargasso in 2023, fishing vessels used drifting longlines with an estimated combined total length of 1,980km, enough to cover the distance from the UK to Morocco.

Thirty-three longline vessels were active on the high seas area of the Sargasso Sea in 2023, spending a combined total of 22,881 hours engaged in apparent fishing activity. Fishing activity peaked during the Covid pandemic in 2020 and then dipped in 2021–22, but the 2023 data suggest it is rising again.

These longliners accounted for 97% of the total fishing activity in 2023, and the vessels were predominantly from Taiwan (13,021 hours of fishing in 2023), USA (4,169 hours), China Mainland (2,789 hours) and Spain (2,311 hours).

Bermuda's vessels were not present on the high seas. Bermuda's local fisheries target pelagic species like wahoo and yellowfin tuna within their national waters, which an ocean sanctuary

would not cover, while in other Caribbean waters commercial fishers catch wahoo, dolphinfish and amberjack, which all depend on the Sargasso Sea at various stages of their lifecycle.

There are many seamounts dotted across the Sargasso Sea, including the New England and Corner Rise ranges in the north and the Muir chain in Bermuda's national waters. Precautionary closures of some seamounts mean that bottom trawling is vastly reduced and currently makes up a small fraction of the fishing effort in the Sargasso Sea, but even limited amounts of trawling can cause severe damage to the seafloor. Between 1976 and 1996 around 20,000 tonnes of fish were trawled from the Corner Rise seamounts and the seafloor still bears the scars of those operations.¹⁶

MINING

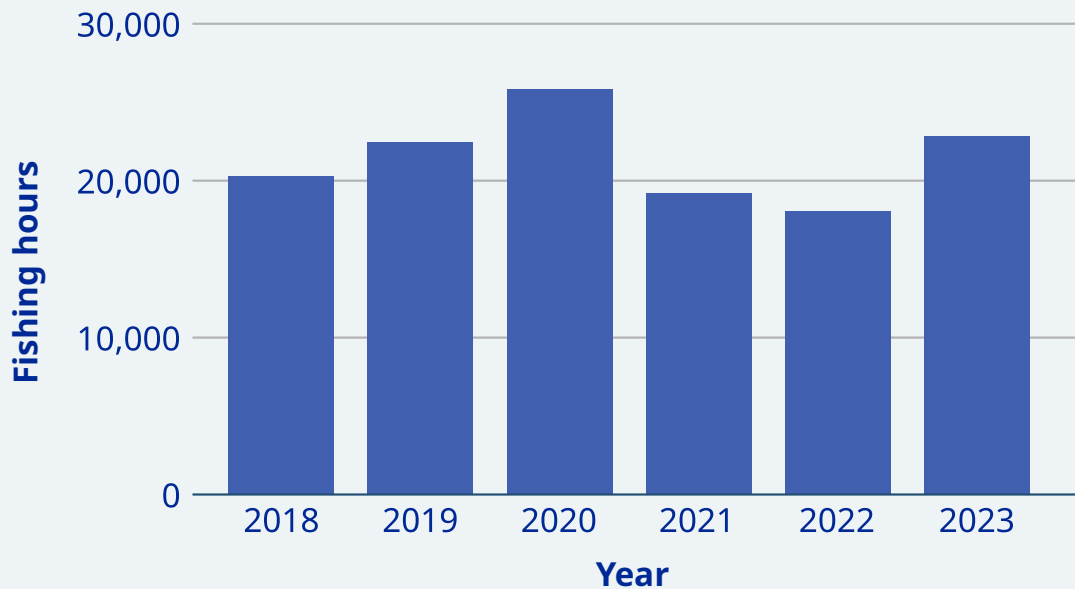
Deep-water ecosystems grow and develop incredibly slowly, so they aren't able to recover from human impacts on human timescales. Deep-sea mining isn't currently taking place commercially anywhere in the world but it poses a huge threat to the global seafloor. Polymetallic sulphides and gas hydrates deposits have been found on the Sargasso's seabed, and while these are not considered commercially significant, an exploration mining contract has been granted for the Mid-Atlantic Ridge by the International Seabed Authority in waters just outside the Sargasso Sea.



A shark is hauled onboard a Spanish longliner targeting swordfish in the south east Atlantic © Tommy Trenchard / Greenpeace

TOTAL APPARENT FISHING HOURS ON THE SARGASSO SEA HIGH SEAS AREA, 2018–2023

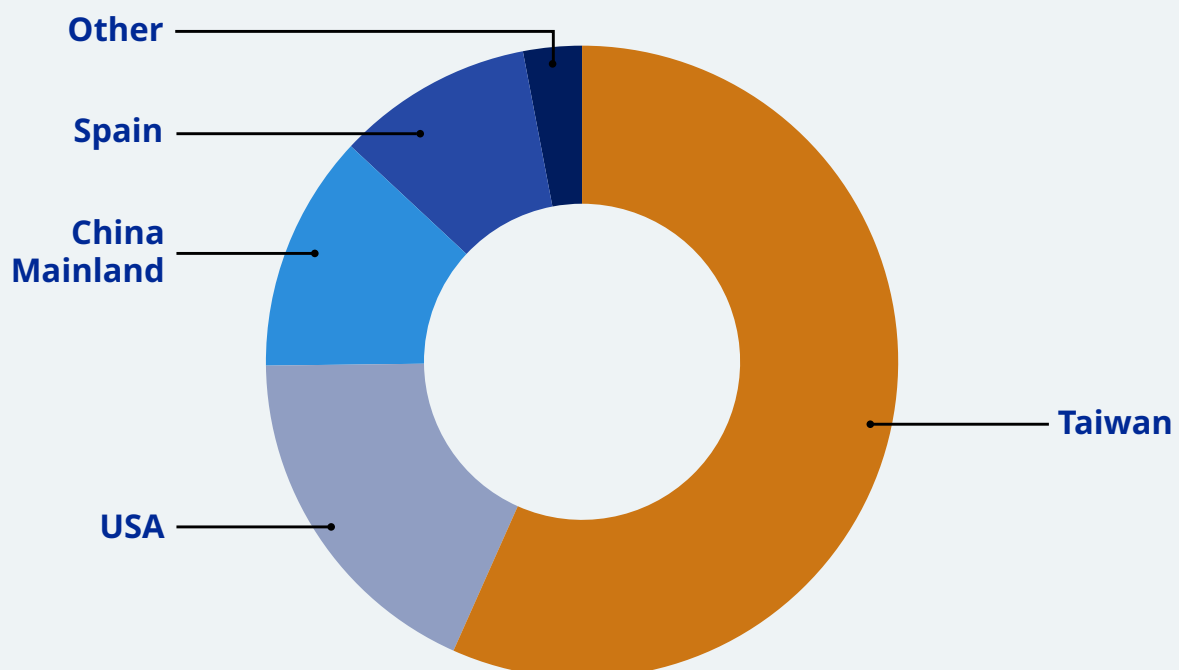
Activity includes all fishing gear and flag states



Source: Global Fishing Watch

PROPORTION OF APPARENT FISHING BY FLAG STATE ON THE SARGASSO SEA HIGH SEAS AREA IN 2023

Vessels flagged to Taiwan make up more than half the total apparent fishing activity



Source: Global Fishing Watch

CLIMATE CHANGE

Sitting at the heart of the Sargasso Sea, Bermuda is home to Hydrostation S and the Bermuda Atlantic Time-Series Study, which together hold one of the longest continuous records of conditions in the open ocean anywhere in the world.¹⁷ Stretching back nearly 70 years, it clearly shows the surge in ocean temperature that has occurred in the past few decades as a result of our addiction to burning fossil fuels.

The Sargasso Sea has warmed by nearly 1°C since 1983.¹⁸ A mass fish die-off observed in Bermuda in 2017 was suspected to be the result of a marine heatwave, where the surface ocean temperature was briefly much higher than normal. As the temperature has climbed, the water around Bermuda has become saltier and the level of dissolved oxygen has decreased. These changes, combined with acidification due to rising CO₂ levels, place marine organisms under greater stress and increase their exposure to disease and infection.

POLLUTION

The currents and eddies that draw mats of sargassum into the Sargasso Sea also act to trap large volumes of the plastic pollution that drifts

through the Atlantic. During its 2024 voyage through the Sargasso Sea, crew on the Arctic Sunrise pulled more than 300 pieces of plastic out of one sargassum mat in a little over half an hour. Macroplastics such as bags and lost fishing nets are known to entangle and drown turtles and cetaceans, while the soup of microplastics found throughout the global ocean is much denser in the Sargasso Sea than the surrounding waters of the North Atlantic.¹⁹

International shipping is also a major generator of sea surface pollution. Ship-related impacts on high seas ecosystems may include discharges of sewage and greywater, toxic antifouling paint, the introduction of alien species through ballast water, collisions with whales, chronic oil pollution, physical damage to Sargassum mats, and the ever-present risks from accidents and spills. Shipping also produces a cacophony in the water column, reducing the ability of animals like whales to use sound to communicate and to 'see' through hearing.²⁰ An analysis by Greenpeace of Lloyd's List Intelligence shipping data showed that over 9,000 ships spent the equivalent of 213 years crossing the Sargasso in 2023. The majority of these vessels (7,236) were giant ships more than 100m long, weighing over 10,000 tonnes each.²¹



Plastic found in the Sargasso Sea © Deirdre Leowinata / Greenpeace

GAPS IN CURRENT SARGASSO SEA HIGH SEAS GOVERNANCE

The environment of the Sargasso Sea is currently regulated by the the International Maritime Organisation (IMO) for shipping and pollution, the International Seabed Authority (ISA) for the deep seabed, and the International Convention for the Conservation of Atlantic Tunas (ICCAT) and the North-west Atlantic Fisheries Organisation (NAFO) for fishing.

ICCAT and NAFO are Regional Fisheries Management Organisations (RFMOs), which exist to sustainably manage fishing in international waters. Globally, the first RFMOs were established in the early twentieth century and over their lifetime they've contributed to the ever deepening ocean crisis. There have been isolated instances of recovery, but in 2016, 75% of an assessed 48 high seas fish populations were considered depleted or overfished.

Each RFMO covers different areas and fish populations, but they suffer from common regulatory failings:²²

Limited scope:

Each RFMO is only concerned with a limited number of species and carries out population assessments individually, rather than looking at the broader ecosystem. There are several industrial high seas fisheries that operate without any RFMO oversight.

Vested interests:

Many RFMOs use consensus based decision making which allows individual actors with industrial fishing interests to derail the conservation ambitions agreed by the majority of nations.

Lack of transparency and accountability:

Civil society participation and scrutiny of RFMO meetings can be severely restricted, while industry representatives are frequently granted a seat at the table, often being included in government delegations.

Failure to follow scientific advice:

Observer coverage rates on most RFMO fleets remain insufficient (despite recommendations from their own scientific bodies), almost no bycatch species have mortality caps and many Vulnerable Marine Ecosystems remain unprotected. Delegates consistently use doubt and a lack of scientific certainty as a tool to delay any progress towards new conservation measures.

The patchwork nature of high seas governance plays out in the Sargasso Sea. ICCAT has responsibility for tunas and some species of billfish, while NAFO covers some of the species that dwell on seamounts in the Sargasso area. All other species and fishing operations don't have any regulatory oversight.

The Sargasso Sea Commission has been pushing for both RFMOs to introduce conservation measures, and has had success with NAFO introducing a temporary ban on bottom trawling on some seamounts. However, ICCAT has been very slow to make progress on recommendations to introduce an ecosystem-based approach to management, rather than narrowly focusing on individual species.

The Sargasso Sea Commission has put significant resources into working with the relevant RFMOs over the past decade, but the limited movement from the RFMOs over that time highlights the problems of current high seas governance. These gaps can be addressed by the Global Ocean Treaty, which will allow the creation of ocean sanctuaries that protect the full ecosystem.

SARGASSO SEA COMMISSION

Established in 2014 with the signing of the Hamilton Declaration in Bermuda, the Sargasso Sea Commission acts to “encourage and facilitate voluntary collaboration toward the conservation of the Sargasso Sea”. Government signatories include: Azores, Bahamas, Bermuda, British Virgin Islands, Canada, Cayman Islands, Dominican Republic, Monaco, United Kingdom and United States.



BERMUDA: CHAMPIONING A SARGASSO SEA OCEAN SANCTUARY

Bringing the Global Ocean Treaty into force in 2025 would provide an opportunity for Bermuda and its allies to dramatically improve the Sargasso Sea's health, productivity and resilience.

The potential of the Sargasso Sea for being one of the first high seas ocean sanctuaries has been acknowledged by the Bermudian government, with Deputy Premier Walter Roban noting that:

"the Sargasso Sea must already be a poster child for early recognition by the new [Global Ocean Treaty]".²³

Bermuda's relationship with the Sargasso Sea embodies a long-standing commitment to environmental stewardship. During their time in Bermuda, the Greenpeace team met with hundreds of members of the Bermudian public through conversations at open boat events, civil society receptions, school visits and a beach clean.

It is clear that Bermudians are deeply committed to ocean conservation. Naturally, given Bermuda's location, there was a particular interest amongst the public in the potential for protecting the Sargasso Sea.

"The Bermuda government and the people of Bermuda have always been stewards of the Sargasso Sea. We're inherently connected to it, it's a huge form of biodiversity recruitment for our waters."

Fae Sapsford, Marine Research Fellow with the Sargasso Sea Commission



Walter Roban, deputy premier of Bermuda at ocean sanctuary workshop on the Arctic Sunrise © Tavish Campbell / Greenpeace

"If fishers are part of the problem, they must be part of the solution. Engaging fishers in decision making processes (like this one) is absolutely necessary if their cooperation is to be won."

Jamie Walsh, secretary of the Fishermen's Association of Bermuda

OCEAN JUSTICE

The preservation of the Sargasso Sea intersects with broader issues of climate justice, particularly for small island nations like Bermuda that are on the front lines of climate change. Protecting this sea is not just about conserving biodiversity but also about ensuring the resilience of the island in the face of rising sea levels, increased storm activity and other climate-related challenges.

Climate justice emphasises the disproportionate impact of climate change on vulnerable communities. The economic impacts of climate change on Bermuda are significant and multifaceted. Environmental changes threaten local industries, particularly tourism and fisheries, while climate change further drives up the cost of living through higher insurance premiums, food prices and infrastructure repairs needed

to address more frequent and severe weather events, like Hurricane Ernesto. Hitting the island in August 2024, it left tens of thousands of people without electrical power and internet access.²⁴

As a result of these problems, many young professionals feel compelled to leave the island for more stable prospects, further weakening the local economy.²⁵

At an ocean sanctuary workshop held on the Arctic Sunrise, Greenpeace was able to hear directly from a wide range of individuals and organisations about the benefits that a Sargasso Sea Ocean Sanctuary could bring to Bermuda and the wider world. Attendees were drawn from Bermudian conservation and fisher organisations, the Sargasso Sea Commission and scientists, as well as Bermudian government representatives, including Deputy Premier Walter Roban.

An ocean sanctuary would relieve anthropogenic pressures on the ecosystem on the high seas over a 3.7 million square kilometre area around Bermuda, improving the conditions for wildlife such as whales, seabirds and turtles.²⁶ Areas where fishing pressure is removed produce a spillover effect, meaning fishing opportunities increase in neighbouring waters. Fishing is important to Bermuda, both as a livelihood and as a food source on an island where importing goods is expensive, so a high seas ocean sanctuary could deliver an important domestic fishing boost.



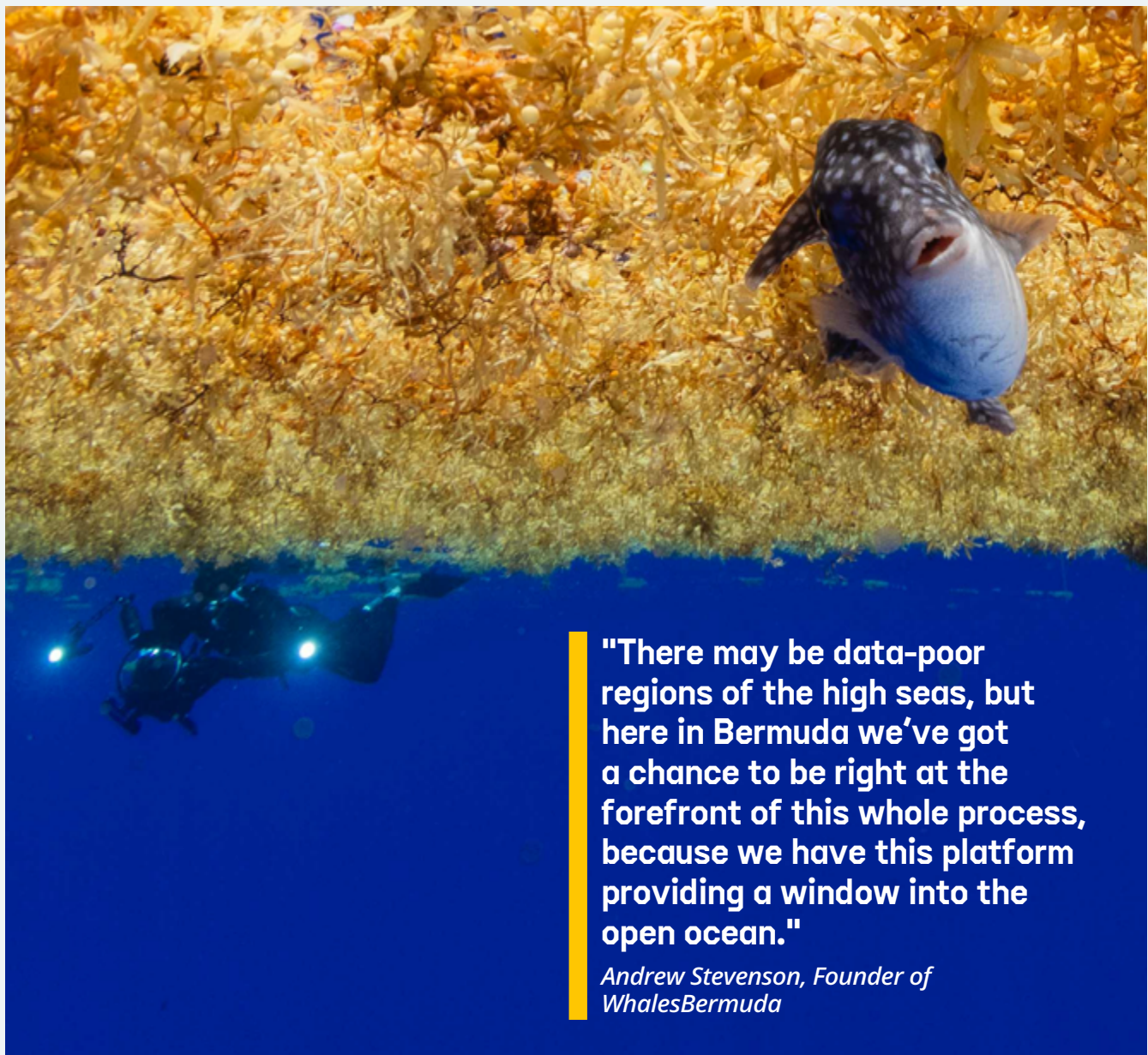
Participants at ocean sanctuary workshop on the Arctic Sunrise © Tavish Campbell / Greenpeace

Tourism is vital to Bermuda's economy. The pristine environment offered by the ocean sanctuary, combined with increased visibility for the region as a world leader in conservation, would likely be a big draw for tourists. Bermuda would be the natural staging post for the increased scientific activity that would be needed to properly monitor the condition of the Sargasso Sea, providing a boost for local businesses.

The more intangible benefits of designating the Sargasso Sea among the first high seas ocean sanctuaries were also plain to those attending the workshop. Taking a position on the governing body for the Sargasso Sea would provide a

leadership role for Bermuda on the world stage and present new opportunities for international collaboration.

Younger generations in Bermuda face the same challenges as their peers around the world, not least a barrage of bad news and negative predictions for the coming decades. One workshop attendee spoke movingly about how these concerns had led their children to form a bleak outlook for their future. But they went on to describe how an achievement on the scale of the Sargasso Sea Ocean Sanctuary could bring hope to young people in Bermuda, and with it a sense that a more positive future is possible.



"There may be data-poor regions of the high seas, but here in Bermuda we've got a chance to be right at the forefront of this whole process, because we have this platform providing a window into the open ocean."

Andrew Stevenson, Founder of WhalesBermuda

THE VOYAGE AHEAD

The ecological, economic and societal benefits for creating a Sargasso Sea Ocean Sanctuary are evident. The UK should now take forward the momentum and ambition of the treaty to deliver meaningful protection in the Sargasso Sea and at other potential ocean sanctuary sites.

LOCAL EXPERTISE

A key problem for those advocating for high seas oceans sanctuaries is that this hasn't been done before under the new Treaty. As a result, there's a shortage of knowledge about the process of setting up protected areas under the Treaty and how those areas will function.

Fortunately, this absence provides a space for active parties to set the agenda now and make a clear case for regulatory models that will produce the conservation gains needed in this time of biodiversity and climate crises. This way it will avoid the many governance problems found in the RFMOs. Bermudians have spent more time thinking about how to achieve a Sargasso Sea Ocean Sanctuary than anyone else, and at Greenpeace's ocean sanctuary workshop Bermudian community groups voiced their thoughts on the challenges that are faced and ways to forge ahead.

"The work remains ahead. We're so close to this success of being able to see changes in our ocean that will be effective, that will stabilise and improve over time the health of the Sargasso Sea and the global ocean."

Dr Robbie Smith, a Bermudian and Sargasso Sea commissioner

COOPERATION

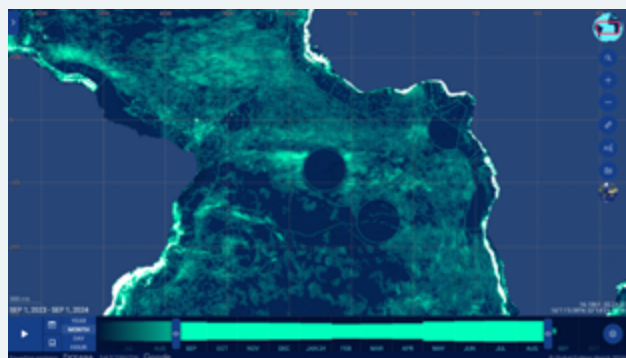
Building an effective alliance of supporters for a Sargasso Sea Ocean Sanctuary at forthcoming Ocean COPs will require collaboration between a disparate set of governments, NGOs, fishers, industry groups and individuals, all with different and sometimes conflicting visions for high seas protection. Again, the solution is to begin building these coalitions now, facilitating engagement between different partners and maintaining a clear and transparent flow of information.

The Sargasso Sea Commission has already had great success in galvanising willing governments to come together in support of conservation of the Sargasso Sea. Bermuda and the UK should use this work as the basis for an alliance of states to champion a Sargasso Sea Ocean Sanctuary at the UN.

OPPORTUNITY

The vast scale of the high seas has always presented a challenge for enforcement, and the situation has been made worse by the weak fabric of ocean governance. As a result, there are reservations about whether it will be possible to regulate high seas protected areas effectively, in light of limited resources and the problems of monitoring large spaces. However, over the past decade the UK's Overseas Territories have presented the strongest possible evidence that massive conservation zones can be a success.

The marine protected areas (MPAs) surrounding Ascension Island, Tristan da Cunha, Pitcairn and South Georgia and the South Sandwich Islands cover 2.3 million square kilometres in total,²⁷ and make up four of the ten largest no-take MPAs in the world. Strong management plans have been combined with satellite monitoring to deliver extremely low rates of illegal incursions by fishing vessels. Compliance and enforcement is supported by the UK's Blue Belt Programme, which had a very modest annual budget of just £8m in 2022–23.



Apparent fishing activity September 2023–September 2024 in the Atlantic Ocean. Fishing is absent inside the Ascension Island marine protected area. Source: Global Fishing Watch

These conservation successes were achieved because of the leadership of the Territory communities. Now Bermuda has the potential to follow in their footsteps and push towards an even more ambitious target. As Bermuda doesn't have a direct voice at the UN, it is incumbent on the UK to step up and take an active leadership role. There are a number of key things that the UK, Bermuda and its allies must do to set the foundations for a Sargasso Sea Ocean Sanctuary.

1 Ensure the UK is one of the first to ratify

The UK must lead the way and support other nations in ratifying the Global Ocean Treaty by early 2025 for it to come into force later in the same year. The Treaty will come into force 120 days after 60 countries have ratified. The EU and its 27 member states have stated they expect to ratify the Treaty in time for the UN Ocean Conference in June 2025.

2 Begin the process of drafting the sanctuary proposal now

The UK and Bermuda must convene other potential champion governments to begin drafting an ocean sanctuary proposal for the first Ocean COP, which will take place within one year of the Treaty coming into force. This should be the first of a series of meetings. Relevant NGOs, fishers and community groups need to be involved from the beginning, and the proceedings and decision-making process should be transparent.

3 Embed local expertise

Bermuda should be appointed as a permanent member of any governing board overseeing the Sargasso Sea sanctuary, to help ensure that the island's welfare is consistently represented in all decision-making processes.

4 Champion a wider network of ocean sanctuaries

The Sargasso Sea will be part of a wider network of ocean sanctuaries that span the high seas. The UK must support other sites as well as the Sargasso Sea for early designation to enable the delivery of 30x30.



ENDNOTES

1. **Laffoley, D.d'A., et al. (2011).** The protection and management of the Sargasso Sea: The golden floating rainforest of the Atlantic Ocean. Summary Science and Supporting Evidence Case. Sargasso Sea Alliance. www.sargassoseacommission.org/storage/documents/Sargasso.Report.9.12.pdf
2. **Laffoley, D.d'A., et al. (2011).** The protection and management of the Sargasso Sea: The golden floating rainforest of the Atlantic Ocean. Summary Science and Supporting Evidence Case. Sargasso Sea Alliance. www.sargassoseacommission.org/storage/documents/Sargasso.Report.9.12.pdf
3. **Huffard C.L., von Thun S., Sherman A.D., Sealey K. and Smith Jr. K.L. (2014).** Pelagic Sargassum community change over a 40-year period: temporal and spatial variability. *Mar Biol.* 161, 2735–2751. DOI: 10.1007/s00227-014-2539-y
4. **Laffoley, D.d'A., et al. (2011).** The protection and management of the Sargasso Sea: The golden floating rainforest of the Atlantic Ocean. Summary Science and Supporting Evidence Case. Sargasso Sea Alliance. www.sargassoseacommission.org/storage/documents/Sargasso.Report.9.12.pdf
5. **Laffoley, D.d'A., et al. (2011).** The protection and management of the Sargasso Sea: The golden floating rainforest of the Atlantic Ocean. Summary Science and Supporting Evidence Case. Sargasso Sea Alliance. www.sargassoseacommission.org/storage/documents/Sargasso.Report.9.12.pdf
6. **Wibbels T. & Bevan E. (2019).** *Lepidochelys kempii* (errata version published in 2019). The IUCN Red List of Threatened Species. <https://dx.doi.org/10.2305/IUCN.UK.2019-2.RLTS.T11533A155057916.en>
7. **Mortimer J.A. and Donnelly M. (2008).** *Eretmochelys imbricata*. The IUCN Red List of Threatened Species. <https://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T8005A12881238.en>
8. **Coston-Clements L., et al. (1991).** Utilization of the Sargassum habitat by marine invertebrates and vertebrates, a review. NOAA. <https://repository.library.noaa.gov/view/noaa/9151>
9. **Fae Sapsford, Nonsuch Expeditions Bermuda (2022).** 2022 Cahow Season Sees Record Number of Cahow Fledgling www.nonsuchisland.com/blog/2022-cahow-season-sees-record-number-of-cahow-fledglings Accessed 12/09/2024.
10. **Wright R.M., Piper A.T., Aarestrup K. et al. (2022).** First direct evidence of adult European eels migrating to their breeding place in the Sargasso Sea. *Sci Rep* 12, 15362 (2022). <https://doi.org/10.1038/s41598-022-19248-8>
11. **Righton D., Piper A., Aarestrup K., et al. (2021).** Important questions to progress science and sustainable management of anguillid eels. *Fish and Fisheries*; 22: 762–788. <https://doi.org/10.1111/faf.12549>
12. **Angel M. V. (1990).** Life in the benthic boundary layer: connections to the mid-water and sea floor *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences* 331 15–28 <http://doi.org/10.1098/rsta.1990.0053>
13. **Ullman D. J., McKinley G.A., Bennington V., and Dutkiewicz S. (2009).** Trends in the North Atlantic carbon sink: 1992 – 2006, *Global Biogeochem. Cycles*, 23, GB4011, doi:10.1029/2008GB003383
14. **CBD (2015).** Ecologically or Biologically Significant Areas (EBSAs): The Sargasso Sea. <https://chm.cbd.int/database/record?documentID=200098> Accessed 12/09/2024.
15. Many Audubon organisations across the globe have become aware of John James Audubon's legacy as someone who owned, purchased and sold enslaved people, and also actively opposed the abolitionist movement. In response, the Bermuda Audubon Society alongside others are actively considering and working to change their names to better reflect their values (such as the NYC Bird Alliance). Greenpeace UK also acknowledges this legacy and does not support the honouring of enslavers. We recognise that [environmental justice](#) cannot be realised without racial justice, and that's why we're [committed](#) to dismantling systemic racism.
16. **Shank T.M. (2010).** New England and Corner Rise seamounts. The Oceanography Society DOI: 10.5670/OCEANOGRAPHY.2010.76 https://tos.org/oceanography/assets/docs/23-1_shank2.pdf
17. **Bermuda Ocean Prosperity Plan (2022).** The State Of Bermuda's Waters: A Snapshot of Bermuda's Exclusive Economic Zone (EEZ) From the Coastline to 200 Nautical Miles (nm). www.bermudaoprosperty.org/files/ugd/47d1fd_b472e14339544e5d8942ea83e477925c.pdf Accessed 12/09/2024.
18. **Bates N.R. and Johnson R.J. (2023).** Forty years of ocean acidification observations (1983–2023) in the

- Sargasso Sea at the Bermuda Atlantic Time-series Study site. *Front. Mar. Sci.* 10:1289931. doi: 10.3389/fmars.2023.1289931 www.frontiersin.org/articles/10.3389/fmars.2023.1289931/full
19. **Law K.L. et al. (2010).** Plastic Accumulation in the North Atlantic Subtropical Gyre. *Science* 329, 1185-1188. DOI:10.1126/science.1192321
 20. **Llabrés Pohl I. (2023).** The State of Shipping and Oceans: Understanding the impact of global shipping on climate, the ocean and human health. Consultancy report for Seas at Risk, Brussels, Belgium. <https://seas-at-risk.org/wp-content/uploads/2023/07/The-State-of-Shipping-and-Oceans-Report-Final.pdf>
 21. **Llabrés Pohl I. (2023).** The State of Shipping and Oceans: Understanding the impact of global shipping on climate, the ocean and human health. Consultancy report for Seas at Risk, Brussels, Belgium. <https://seas-at-risk.org/wp-content/uploads/2023/07/The-State-of-Shipping-and-Oceans-Report-Final.pdf>
 22. **Carmin G., Crespo G.O., Greenpeace International (2024).** Un-tangled: How the Global Ocean Treaty can help repair high seas mismanagement. www.greenpeace.org/international/publication/67495/untangled-global-ocean-treaty-high-seas-mismanagement/
 23. **Sargasso Sea Commission (2024).** Minister Walter Roban Celebrates the 10th Anniversary of the Hamilton Declaration. www.youtube.com/watch?v=abn_cS5oIws Uploaded 14/03/2024.
 24. **France24 (2024).** Hurricane Ernesto downgraded to tropical storm as it exits Bermuda. www.france24.com/en/live-news/20240817-hurricane-ernesto-lashes-bermuda Accessed 12/09/2024.
 25. **Jonathan Bell, The Royal Gazette (2023).** 'I felt pushed out of my country'. www.royalgazette.com/general/news/article/20230704/i-felt-pushed-out-of-my-country/ Accessed 12/09/2024.
 26. The Sargasso Sea Commission's study area covers ~4.1 million square kilometres including Bermuda's waters, which cover ~400,000 square kilometres. The high seas area would therefore be ~3.7 million square kilometres.
 27. **Marine Conservation Institute (2024).** MPAtlas. Seattle, WA. mpatlas.org Accessed 12/09/2024.

SARGASSO

The sea of opportunity for ocean protection

The high seas make up nearly two thirds of the world's ocean but have historically had very limited conservation governance. Creating a network of ocean sanctuaries on the high seas will be crucial to reaching the global target of protecting at least 30% of the world's ocean by 2030. A Sargasso Sea Ocean Sanctuary should be one of the first sites designated under the Global Ocean Treaty.

Hailed as the greatest ever victory for conservation, the Global Ocean Treaty – agreed at the UN in March 2023 – has made genuine protection of the high seas more possible than ever before. The UK has a unique role to play in global ocean protection and needs to grasp this opportunity now.



GREENPEACE

**PROTECT
THE OCEANS**

Greenpeace UK – November, 2024

Cover image: Sargassum seen on the journey to the Sargasso Sea © Deirdre Leowinata / Greenpeace