The Case for Marine Protected Areas



The damage inflicted by human activity on our oceans is so drastic that it is impossible to ignore. Across the planet, the ocean is too warm, too acidic, and floating with plastic rubbish and other pollution. Coral reefs, kelp forests, and seagrass meadows are dying. More than one-third of fish stocks suffer from overfishing, with many species that were once plentiful now at risk of extinction. Despite the necessity of the ocean for life on Earth, the food and livelihood it provides for one billion people, and its role in regulating our climate, very little of it is protected by law. In fact, only around 8% of the ocean is legally defined as a Marine Protected Area (MPA) under national or international law, and only around 3% is highly protected, meaning practices like industrial fishing and bottom trawling are illegal. "No-take zones," where fishing of any scale is prohibited altogether, are very rare, and in reality, many existing MPAs do not have enough human and financial resources to properly implement conservation and management measures. The real consequences of leaving vast areas of our ocean unprotected are only now coming into sharp focus for policymakers around the world. Action needs to be taken, and fast.

According to the Marine Conservation Society, a Marine Protected Area is like a "national park" or "nature reserve on land, set up to look after particular animals, plants and habitats at sea.³ As well as protecting biodiversity, they protect ecosystems that oxygenate the water, like seagrass meadows, which can produce up to 20 litres of oxygen per square metre per day. Most MPAs are located within national waters, while protection in international waters remains limited due to the complexity of reaching

¹ Duchêne, Hélène. <u>"Letter: Ambitious international action is needed to protect our oceans."</u> The Financial Times

² ICUN "Marine Protected Areas and Climate Change"

https://iucn.org/resources/issues-brief/marine-protected-areas-and-climate-change Accessed 05/06/25.

³ Marine Conservation Society "An Introduction To Marine Protected Areas (MPAs)." https://www.mcsuk.org/ocean-emergency/marine-protected-areas/why-marine-protected-areas-are-important/ Accessed 04/06/25.

agreements and the need for cooperation among multiple governments. Most permit fishing, based on the principle that regulated monitoring will prevent environmental harm or overuse. "No-take MPAs prohibit fishing or collecting but allow visitors for snorkelling or swimming, like the Great Barrier Reef Marine Park, which is visited by over two million tourists per year.4 The strictest MPAs allow no human entry at all; they are usually small and contain very delicate habitats that are being studied for research, like the Seaflower reserve off Colombia's Caribbean coast,5 which is home to over a hundred species of coral, four hundred species of fish, and four of the seven species of sea turtles. With some MPAs, the level of protection varies across the year in response to wildlife. In the Irish Sea, fishing is prohibited during the cod spawning season to protect their eggs and maintain the cod population. 6 Conservationists and scientists—whose expertise helps shape more efficient, targeted regulations—agree that a much larger portion of the ocean must be protected from harmful fishing practices. During the COP15 summit in 2022, 190 countries committed to protecting 30% of the ocean by 2030 under the Kunming-Montreal Global Biodiversity Framework, but as I write this, five years away from the deadline, it seems unlikely this goal will be met, as only a handful of countries outside of the EU are on track.



Alongside protecting more of the ocean, activists are calling for a more specific ban on the destructive fishing practice

known as "bottom-trawling." This is an industrial fishing method where heavy nets are dragged across the sea floor, scooping up bottom-dwelling species. It is a highly destructive process, demolishing marine habitats and killing unwanted fish or mammals unnecessarily as bycatch. It's also shockingly wasteful. It's estimated that the bycatch rate of trawling could be up to 90%, meaning that for every ten fish caught, up to 9 may be unwanted species that are discarded, usually dead or dying. Trawling disturbs the sea floor, releasing vast quantities of sequestered carbon dioxide into the atmosphere, contributing to global warming. An area of the sea floor the size of the United Kingdom is trawled every day, leaving a barren wasteland that can take decades to recover, and releasing 370 million tonnes of carbon dioxide into the atmosphere every year. Although a controversial practice, trawling is legal, even in some marine protected areas, and is particularly widespread in the waters around China, Russia, and Japan, as well as the West Coast of Africa. In the Gulf of Mexico, benthic habitats and turtle populations have been utterly destroyed by shrimp trawling. Around the UK, which is tougher than much of the world on destructive

⁴ Road Genuis "Great Barrier Reef Tourism Statistics" https://roadgenius.com.au/statistics/tourism/australia/great-barrier-reef" Accessed 06/06/25.

⁵ National Geographic "The Importance Of Marine Protected Areas (MPAs)"

https://education.nationalgeographic.org/resource/importance-marine-protected-areas/ Accessed 04/06/25.
⁶ National Geographic "The Importance Of Marine Protected Areas (MPAs)"

https://education.nationalgeographic.org/resource/importance-marine-protected-areas/ Accessed 04/06/25.

WWF "Briging the Business of Bycatch to Light" https://wwf.ca/stories/bringing-the-business-of-bycatch-to-light/ Accessed 08/07/25.

⁸ McVeigh, Karen. "Carbon released by bottom trawling 'too big to ignore', says study" The Guardian 18/01/24.

⁹ McVeigh, Karen. "Carbon released by bottom trawling 'too big to ignore', says study" The Guardian 18/01/24.

fishing practices, trawling is allowed in 90% of MPAs, ¹⁰ begging the question, what does their protected status actually protect them from? As David Attenborough's recent film 'Oceans' attempted to demonstrate, there is fundamentally no point in declaring the ocean protected if industrial trawling is still permitted in those areas. The hard-hitting documentary, which was released in May to coincide with Attenborough's 90th birthday, showed the true extent of coral bleaching and seabed destruction, ending with an emotional call to protect the oceans from trawling.

The case for making trawling illegal is clear. "No catch zones" are already in place in Palau, the Ross Sea, and New Zealand. In these areas, evidence of the ocean's recovery is already visible to scientists. Deep-sea habitats, such as reefs, corals, and seamounts, are protected from destruction, preserving biodiversity and critical ecosystem functions. Fishing of any kind is banned across 80% of Palau's marine territory, giving its coastal ecosystems—home to over 700 species of coral—the chance to recover and thrive. Since these protections were put in place, fish stocks in the protected areas have more than doubled, supporting both biodiversity and the livelihoods of local communities. Palau's success demonstrates how strong conservation measures can restore ocean health and serve as a model for marine protection worldwide.

Coastal communities rely on the ocean to provide food and income. Although countries that choose to protect their oceans from industrial fishing methods will lose licensing profits, the increased biodiversity provides the opportunity to create sustainable tourist opportunities that create jobs and support local economies.¹¹ In the long run, even the fishing industry benefits from the creation of MPAs since healthy fish populations inside these protected areas can supply adult and larval fish to surrounding waters. This

spillover of marine life can boost catches in nearby fisheries and can help with the recovery of predatory species like tuna and sharks. Discounting short-term unsustainable profits, a healthy and bountiful ocean is good for **everyone**.

For years, activists have been campaigning for a ban on marine trawling, and since the release of Attenborough's film, which showed the true extent of the damage these methods can do, these calls have increased tenfold. Slowly, the drive to protect the ocean is coming into force through law. Recently, the UK government has proposed a bill that would ban trawling and shellfish dredging in 41 British MPAs, protecting 30,000 square kilometres from destructive practices. The environment secretary Steve Reed described this bill as "decisive action" that must be taken to prevent the ocean from being "irreversibly destroyed." Naturally, those who make money from industrial fishing will oppose this new law, and there will be a consultation period before the bill is voted on later this year. This bill is a good start in terms of properly protecting the UK seas, and it

¹⁰ McVeigh, Karen <u>"'Feeble' curbs will ban bottom trawling in only three marine parks in England,"</u> *The Guardian* 19/01/23.

¹¹Owoturo, Ari. "Marine Protected Areas Matter." Oceana. 03/01/25.

¹² Pew Charitable Trust "4 Initiatives That Offer Hope For A Healthier Ocean in 2025" https://www.pew.org/en/research-and-analysis/articles/2025/04/25/4-initiatives-that-offer-hope-for-a-healthier-ocean-in-2025 Accessed 05/06/15.

¹³ McVeigh, Karen <u>"Campaigners hail plan to ban bottom trawling in half of England's protected seas"</u> The Guardian 08/06/25.

must pass. Hopefully, it will serve as inspiration for other countries to legislate against dangerous fishing practices and put the future of our oceans above quick profits.

However, individual countries can only achieve so much. The high seas, which are international waters, represent over 60% of the ocean. These waters are currently impossible to protect, as they are not governed by international law, and a lack of surveillance has led to dangerous levels of plastic pollution, illegal fishing techniques, and the endangerment of protected mammals. In 2023, the UN adopted the BBNJ (Biodiversity Beyond National Borders) treaty, which aims to tackle these issues by setting up international MPAs, regulating fishing and mining, and committing to sharing the ocean's resources and improving science and monitoring in international waters.14 The treaty will come into force once 60 countries have signed and ratified it, but many major governments are dragging their feet, making it unlikely that we will see any of the agreement's impact before the end of 2026.

As of last month's United Nations Oceans Conference, ratifications have increased from 28 to 49, but major players like China, India, the USA, Brazil, Australia, Japan, and the UK have not committed. The conference was successful in many ways, with the creation of several new MPAs that may increase the protection figure from 8% to 10%; however, this process is moving too slowly, and the time to protect our oceans from lasting damage is running out. No commitments were made to ban bottom trawling at the conference or to close the \$15.8 billion funding gap. The UN must act now to prohibit trawling as a practice in all marine protected areas and push harder on individual countries to ratify the BBNJ. Without commitment on an international scale to meet the 30x30 goal and end the dangerous and destructive practice of bottom trawling and reform the fishing industry, the oceans will have no chance to recover, and the consequences for humanity will be unimaginable.

¹⁴ Duchêne, Hélène. "Letter: Ambitious international action is needed to protect our oceans." The Financial Times 03/06/25.