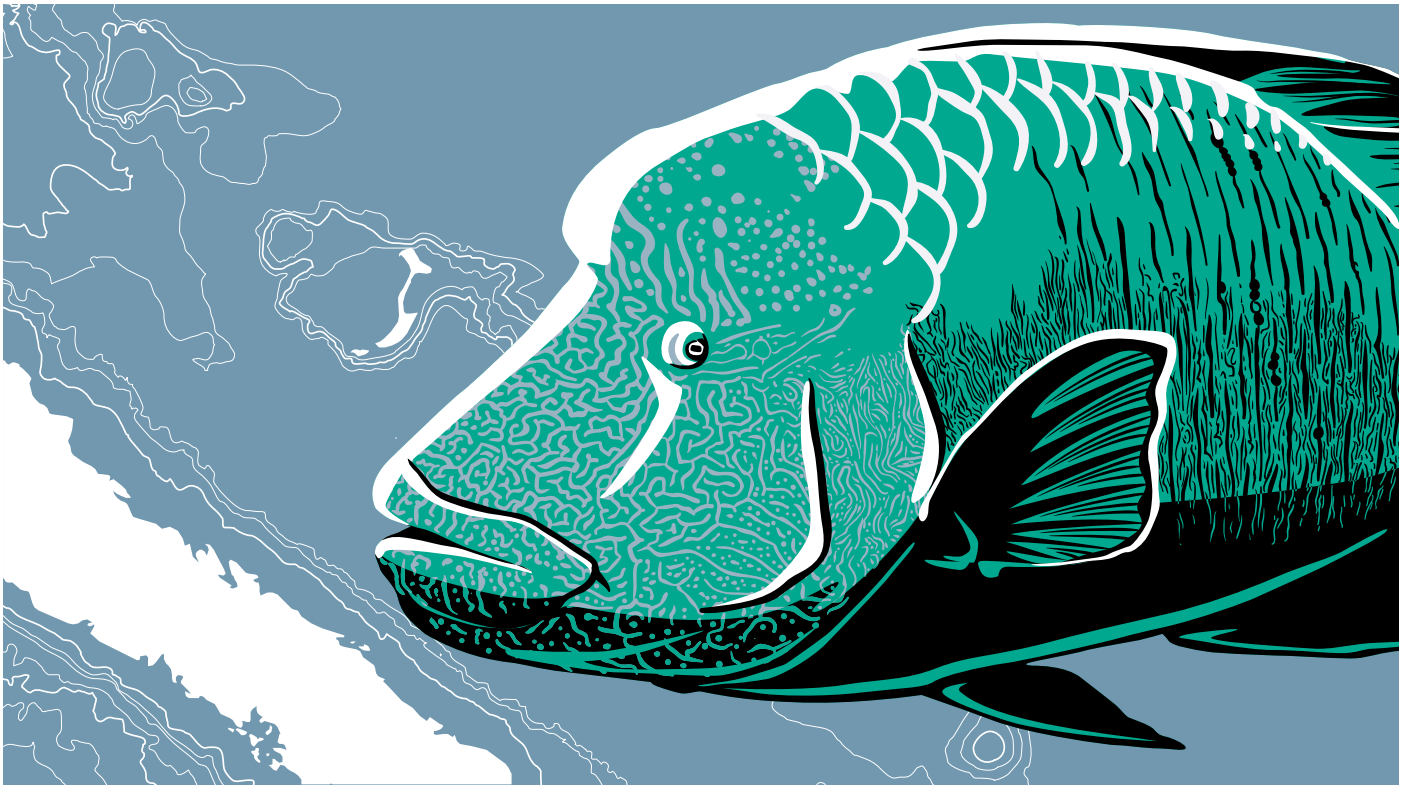


Preserving New Caledonia's Marine Environment

The benefits of a large marine protected area

Overview

The ocean plays a vital role in sustaining life on Earth. It covers almost 75 percent of the globe and contains nearly a quarter of the world's known species—with many yet to be discovered. Its waters sustain billions of people and myriad wildlife. But today, the ocean faces many threats, including overfishing, plastic waste, climate change and loss of biodiversity.

Globally, about a third of fish stocks are being fished at biologically unsustainable levels. The ocean has lost more than 90 percent of large predatory fish, such as tuna and sharks, and about 1 in 5 fish is caught illegally. These trends must be reversed to protect marine biodiversity and to sustain those who depend on these waters for their livelihoods. Establishment of large marine protected areas is a proven way to safeguard specific areas and ensure their protection for the long term.

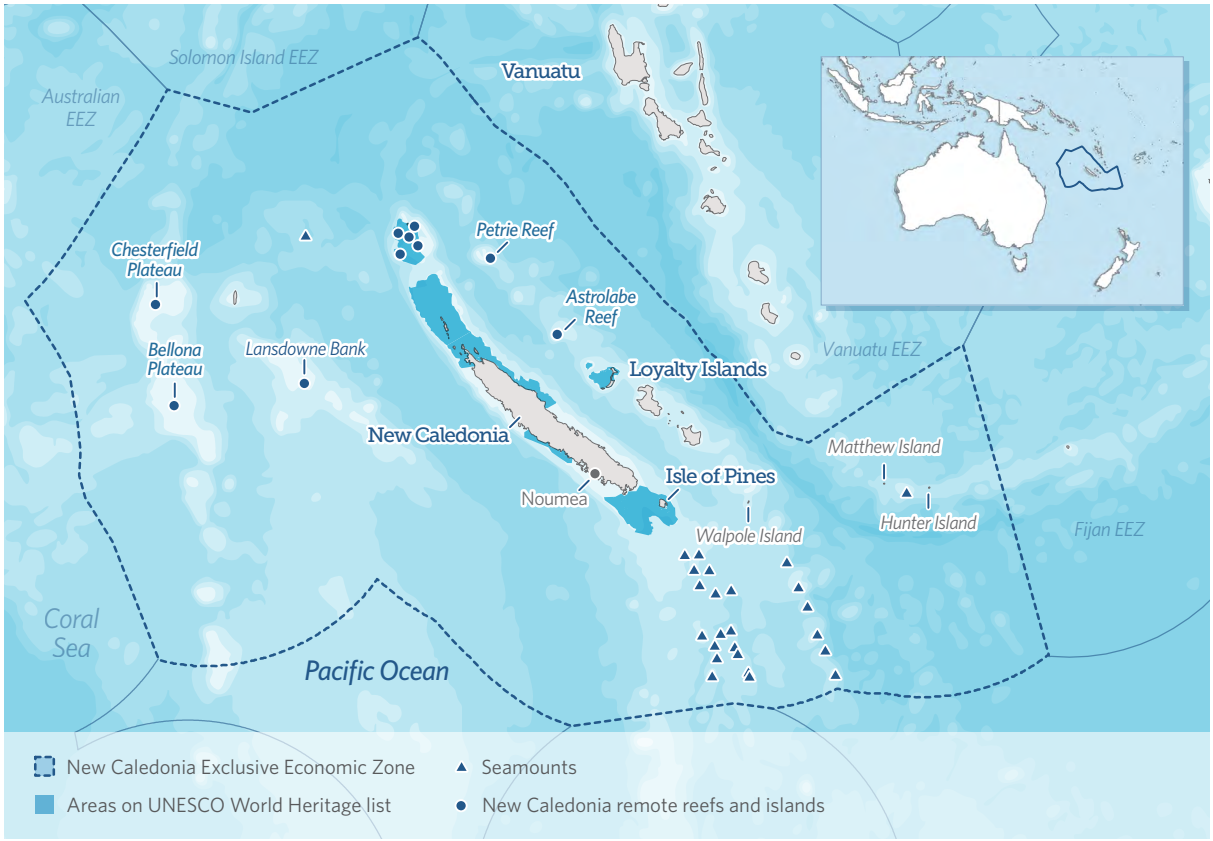
The South Pacific waters surrounding the French Territory of New Caledonia are known for their natural beauty, great biodiversity, and unique ecological processes. These seas possess healthy marine life with many species of fish and corals, a reef system that is among the world's most extensive, and one of the largest lagoons on the planet. The waters are home to biologically diverse and intact marine ecosystems with significant populations of large predators. They also provide habitat for many iconic and threatened species.

In April 2014, New Caledonia's government announced its intention to create a marine management area, known as the Natural Park of the Coral Sea, that covers the territory's entire exclusive economic zone (EEZ). The designation of a highly protected, large marine protected area (MPA) within the nearly 1.3 million-square-kilometer (502,000-square-mile) park would provide long-term protections for the region's marine habitats.

In 2018, the government moved to protect five of New Caledonia's most intact and remote reefs in fully protected MPAs covering 28,000 square kilometers (10,800 square miles). That year, the government also committed to protecting 200,000 to 400,000 square kilometers (154,400 square miles) by the end of 2019 by establishing an MPA within the park that includes highly protected areas. The park's management committee continues to develop an action develop plan to define what zones are protected and how they would be used.

After the designation of the EEZ as the Natural Park of the Coral Sea in 2014, the New Caledonia government invited the Pew Bertarelli Ocean Legacy Project to join the management committee to help plan park protections. The committee also includes representatives from government, local institutions, environmental organizations, local communities, non-governmental organizations and the private sector.

New Caledonia Exclusive Economic Zone



The benefits of creating a large reserve

New Caledonia has a healthy marine ecosystem, thanks in part to restrictions on international fishing fleets and destructive trawling techniques. But many species that swim in these waters are still threatened globally. In addition, the future health of the marine environment is not guaranteed, in large part because of growing pressures from commercial and industrial fishing. Creating large, highly protected MPAs would help ensure that these waters can be safeguarded for future generations.

Science has shown that MPAs improve ocean health through habitat protection, which enables the completion of species' life cycles .[1] When designed well, MPAs can also aid highly mobile or migratory species such as tuna, whales, turtles and sharks.[2] In addition, these large reserves create opportunities for environmentally conscious economic activities such as ecotourism and watersports.

In New Caledonia, coral reefs in particular have economic, social and cultural importance. Six lagoons and coral reefs have been designated UNESCO World Heritage sites, attesting to their universal value.

For these reasons, the Pew Bertarelli Ocean Legacy Project is advocating for the creation of at least one large, highly protected MPA within the Natural Park of the Coral Sea. Fishing and other extractive activities would be prohibited in that area. Local fisherman, however, would be able to continue working in their traditional fishing grounds, which are limited and largely do not overlap with the areas proposed for protection. Establishing a large protected area would foster healthy ecosystems and help preserve the waters of New Caledonia for generations to come.


Sebastien Cote


Jean Re Reve


Jean Re Reve

A large-scale marine legacy

Instituting a large MPA in New Caledonia's EEZ would create the opportunity to connect the Natural Park of the Coral Sea to Australia's Coral Sea Marine Park. Together, they would provide contiguous protection of an immense geographic area and connect World Heritage sites in both EEZs. Linking the parks would demonstrate a regional commitment to management of these waters and protection of the marine environment across the Pacific.

Increasing marine protections also would help New Caledonia meet the recommendation of the International Union for Conservation of Nature (IUCN) to protect 30 per cent of every marine habitat by 2030. Today, about 15 per cent of land areas are protected worldwide, while just over 2 per cent of the ocean is highly protected.[3] Greater safeguards within the Natural Park of the Coral Sea would make New Caledonia a global leader in ocean conservation.

Facts: New Caledonia's marine environment

Liz Fraser

Intact and remote reefs

New Caledonia has the world's second-largest barrier reef and a remarkable diversity of coral reefs. More than 400 coral species have been identified to date. About 1,600 kilometers (1,000 miles) in total length, this unique reef system surrounds the main island and includes a double barrier reef in certain locations.

In August 2018, the government fully protected the Chesterfield, Bellona, Astrolabe, Petrie and Entrecasteaux reefs. These are some of New Caledonia's most isolated reefs and islands. Considered among the most spectacular ecosystems on the planet, they are part of the territory's ocean legacy. Scientists have shown that these reefs have a much greater biomass of fish and density of sharks than many other places in the Pacific islands.[4]

Marine species

About 9,300 species have been identified in New Caledonia's waters. They include 1,700 species of fish, 48 species of sharks, 27 species of marine mammals, 32 species of seabirds and four species of sea turtles.

In addition, many iconic and threatened species can be found in New Caledonia's waters. These include humpback whales, dugongs, large sharks, sea turtles, manta rays, Napoleon wrasse, sea snakes and seabirds. These species depend on healthy habitats for feeding, nesting, reproducing and migrating.

Christian Grondin


Bertrand Richer de Forges

Deep ecosystems

Scientific studies have highlighted the exceptional nature of New Caledonia's deep ecosystems.[5] They have revealed high levels of biodiversity, previously unknown species, and species from ancient groups, such as the endemic nautilus and the living fossil crinoid, Gymnocrinus richeri, that had been thought to be extinct 140 million years ago. The deep reefs and seamounts provide rich and productive habitats for some species found nowhere else.

Nesting seabirds

New Caledonia is home to an estimated 2.5 million seabirds, including frigates, puffins, petrels, terns and boobies. These islands are internationally recognized as important bird areas.[2] Their abundance indicates the productivity of the marine environment and its good health.


Christian Grondin


Christian Grondin

Conclusion

The Government of New Caledonia can secure its ocean legacy and its role as a conservation leader by designating a large MPA within the Natural Park of the Coral Sea. Implementing greater protections would also link these waters with protected areas established by Australia, resulting in a massive, globally significant marine ecosystem.

Such a designation also would help the New Caledonia Government meet the IUCN recommendation of protecting 30 per cent of ocean habitats by 2030, setting an example for others who have not yet risen to that challenge.

Endnotes

1 Graham J. Edgar, et al., "Global Conservation Outcomes Depend on Marine Protected Areas With Five Key Features," *Nature* 506 (2014): 216-220, https://www.nature.com/articles/nature13022

2 Kristina Boerder, Laurenne Schiller and Boris Worm, "Not All Who Wander Are Lost: Improving Spatial Protection for Large Pelagic Fishes," *Marine Policy* 105 (2019): 80-90,

3 Atlas of Marine Protection, "MPAtlas", last modified December 1, 2018, http://www.mpatlas.org/map/mpas/

4 Alan M. Friedlander, et al., "Pristine Coral Sea: The Distant Reefs of New Caledonia. Report to the Government and the Three Provinces of New Caledonia" (Institute for Research for Development, Nouméa, New Caledonia, 2014), https://www.issuelab.org/resource/pristine-mer-de-corail-les-recifs-eloignes-de-nouvelle-caledonie-rapport-au-gouvernement-et-aux-trois-provinces-de-la-nouvelle-caledonie.html"

5 Bertrand Richer de Forges, Cristian Hoffschir, Céline Chauvin and Claude Berthault, "Inventaire Des Espèces de Profondeur de Nouvelle-Calédonie" (Institute for Research for Development, Nouméa, New Caledonia, 2005), http://www.sprep.org/att/irc/ecopies/countries/new_caledonia/10.pdf"

This fact sheet was updated in August 2018 to reflect the minor changes to the map.

For further information, please visit:

pewtrusts.org/ocean-legacy

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The Pew Bertarelli Ocean Legacy Project | The Pew Charitable Trusts and the Bertarelli Foundation joined forces in 2017 to create the Pew Bertarelli Ocean Legacy Project, with the shared goal of establishing the first generation of ecologically significant and effective marine protected areas around the world. This effort builds on a decade of work by both organizations to protect the ocean. Between them, they have helped to obtain designations to safeguard over 8 million square kilometers (3 million square miles) of ocean by working with philanthropic partners, indigenous groups, community leaders, government officials, and scientists. Since 2010, the Bertarelli Foundation has sought to protect the ocean for future generations through marine conservation and collaborative marine science research.