

Preserving New Caledonia's Marine Environment

The benefits of a large and highly protected marine reserve

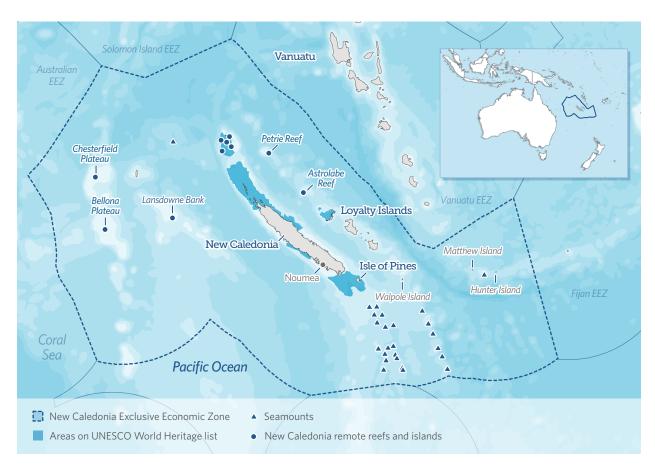
Overview

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. These waters sustain billions of people and myriad wildlife.

But today, the ocean faces many threats, including industrial fishing, plastic waste, climate change, overfishing, and illegal fishing. Globally, almost 90 percent of fish stocks are fully exploited or overexploited, and about 1 in 5 fish is caught illegally. In the Pacific Ocean, bigeye tuna populations have been decimated. These trends must be reversed in order to protect marine biodiversity in these waters and to continue to sustain those who depend on them.

A few healthy marine environments remain. They benefit from a great diversity of marine life that warrants conservation. The establishment of large and highly protected marine reserves would safeguard these sites and ensure their protection for the long term.

New Caledonia Exclusive Economic Zone



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New Caledonia, a French territory in the South Pacific, is among these still intact sites. The surrounding waters are known for their natural beauty, great biodiversity, and unique ecological processes. They 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. These waters are home to pristine ecosystems and 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 area within the nearly 1.3 million-square-kilometer (501,930-square-mile) park would provide long-term protections for the region's marine habitats. As of mid-2017, the government continues to work on a management plan to define the zones of the park, how they would be used, and how much of the park would be protected.

The Pew Bertarelli Ocean Legacy Project has been invited by New Caledonia to join the management committee planning the Natural Park of the Coral Sea. Other members include representatives from government, local institutions, environmental organizations, local communities, nongovernmental organizations, and the private sector.

The benefits of creating a large reserve

The waters of New Caledonia are healthy today because of restrictions on international fishing fleets and destructive trawling techniques. But with growing pressures from commercial and industrial fishing, the future health of the marine environment is not guaranteed. Creating large and highly protected marine reserves would ensure that these waters would be safeguarded for future generations.

According to scientists, marine protected areas help further ocean preservation by conserving habitats and enabling completion of species' entire life cycles, which also aids highly mobile or migratory species such as tuna, whales, turtles, and sharks. In addition, these large reserves create opportunities for environmentally conscious economic activities rather than those that are excessively extractive, such as industrial overfishing.

In New Caledonia, the reefs also have economic, social, and cultural importance. Of the lagoons and coral reefs, six have been designated UNESCO World Heritage sites, attesting to their universal value.

For these reasons, Pew has recommended that at least one vast, highly protected marine reserve be included in the Natural Park of the Coral Sea. Within that area, fishing and other extractive activities would be prohibited. The livelihoods of local fishermen would not be affected because they would be able to continue fishing in waters where they are currently working. This level of protection would foster healthy marine ecosystems and help preserve the waters of New Caledonia for generations to come.



A large-scale marine legacy

Instituting a large and highly protected marine reserve in New Caledonia's EEZ would also result in the chance to connect the Natural Park of the Coral Sea to the already declared Australian Coral Sea Marine Park. Together, they would provide contiguous protection of an immense geographic area and would connect World Heritage sites in both EEZs. Linking these two parks would form the first transboundary protected marine area in the world, demonstrating a regional commitment to management of these waters and protection of the marine environment across the Pacific.

The Natural Park of the Coral Sea would significantly contribute to France's goal of protecting 20 percent of the nation's waters by 2020. Extractive industrial and commercial activities would be banned in half of its protected waters.

A large and highly protected marine reserve also would help meet what is known as the United Nations Aichi Biodiversity Target 11, which calls for 10 percent of the world's marine and coastal areas to be protected by 2020. The Natural Park of the Coral Sea would make New Caledonia a global leader in ocean conservation. Today, some 15 percent of land areas are protected worldwide, while only about 3 percent of the ocean is similarly preserved.



Facts: New Caledonia's marine environment



Pristine islands and reefs

Chesterfield, Bellona, Astrolabe, Petrie, and Entrecasteaux are among New Caledonia's isolated reefs and islands. Considered among the last unspoiled sites on the planet, they are part of the territory's ocean legacy. Scientists have shown that the pristine reefs of New Caledonia have a much greater biomass of fish and density of sharks than do 63 other sites in 17 Pacific islands.

Marine species

Some 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 marine birds, and four species of turtles.¹

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.





Deep ecosystems

Scientific studies have highlighted the exceptional nature of New Caledonia's deep ecosystems. 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.

700,000 pairs of nesting seabirds

New Caledonia is home to an incredible variety of seabirds, including frigates, puffins, petrels, terns, and various species of booby birds. About 700,000 pairs nest on remote islands as part of an estimated 2.5 million birds found across the territory. These islands are internationally recognized as important bird areas.² Their abundance indicates the productivity of the marine environment and its good health.





Unique coral 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 completely surrounds the main island and includes a double barrier reef in certain locations.

Endnotes

- 1 C. Payri, B. Richer de Forges, and F. Colin, Compendium of Marine Species From New Caledonia, Institute of Research for Development (2007). http://nouvelle-caledonie.ird.fr/science-en-partage/editions/documents-scientifiques-et-techniques2/compendium-of-marinespecies-from-new-caledonia-second-edition.
- BirdLife International, "Endemic Bird Area Factsheet: New Caledonia" (2015). http://www.birdlife.org/datazone/ebafactsheet. php?id=201.

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.