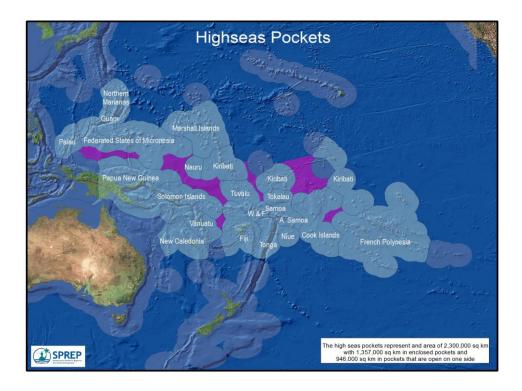
Could Covid help to protect the Pacific's fisheries?

On any other Easter holiday in such perfect weather, at least 30-40 recreational boats would be in the small part of the Hauraki Gulf that is framed by my kitchen window. This year, however, there was not a boat to be seen. New Zealand is in a one-month lockdown and the vast majority of the population is required to stay at home, with all non-essential travel prohibited. Snapper is the most popular table fish, and the target species for both commercial and amateur fishers for the northern North Island. Since the Hauraki Gulf snapper stocks are currently around 20% of their initial size and there are over 20,000 recreational fishers in the Gulf, this enforced break in fishing pressure will clearly benefit the snapper population, at least for as long as it lasts.

Much has been said in recent days about the potential benefits for wildlife from the Covid-19 global epidemic; coyotes have been seen on the Golden Gate Bridge in San Francisco; wild boar are becoming bolder in Barcelona and Bergamo, Italy; and in Wales, peacocks have strutted through Bangor and sheep have been filmed on roundabouts. I have spent many years in the Pacific, working with Pacific governments and communities on marine conservation issues, and I wonder what will happen to Pacific tuna fisheries in a post-Covid world; and whether there will be any benefits for the Pacific islands, most of whom rely heavily on the revenues raised from fishing licences issued to foreign nations.

Within the Pacific islands region, which covers roughly 10% of the global ocean surface, are 15 independent countries and 6 Territories. Unlike most other parts of the global ocean, the Exclusive Economic Zones of Pacific Islands Countries and Territories are largely conjoined, although there are a few small 'pockets' of high seas.



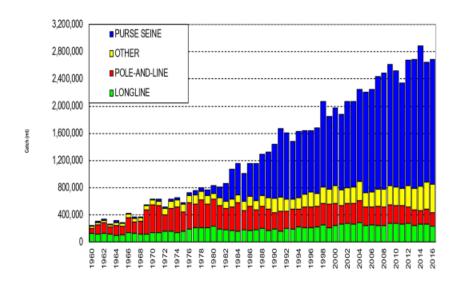
Rather than Small Island Developing States, Pacific Islands leaders see themselves as Large Ocean States, and are united in their vision of a Blue Continent. Given its heavy dependence on the sea, the Pacific Islands bloc has become increasingly vocal globally on oceans issues.

The recent announcement that Pacific island fisheries observers would all be recalled and repatriated at the earliest opportunity to be with their families during the Covid crisis was an understandable act

of compassion. The Pacific islands contain the world's most valuable tuna fishery. nearly three-quarters of the world's tuna landings come from Pacific waters, and the end value of Pacific tuna, including canned, exceeded USD 22 billion in 2015. The tuna industry in the Pacific region is worth USD 40 billion per year and supports a range of livelihoods. Pacific tuna is considered a key affordable protein source for the world.

Over 50% of the catch is skipjack tuna, taken in the main by purse seine fishing vessels and mostly destined for canning in Asian factories. Purse seiners are expensive vessels, and although their number (between 300 and 350) is only around 10% of the number of vessels authorised to fish in the region, they account for the great majority of the total tonnage of the 4 main tuna species (skipjack, albacore, yellowfin and bigeye. In recent years, Pacific countries have required an observer to be carried on board every purse seiner fishing in their economic zones, which has provided a reliable dataset of catch and effort. However, longline vessels, although they are far more numerous than purse seiners in the Pacific islands, have a much lower observer coverage - generally less than 5%. The scale of the by-catch of threatened species of dolphins, turtles and sharks by the longline fleet is unknown, in part because of a lack of observer data.

TUNA CATCH IN PACIFIC ISLANDS BY GEAR TYPE



Working as a fisheries observer in the Pacific islands and being culturally isolated for weeks on board a small crowded vessel is not only hard, it is also highly dangerous. Skippers and crews often put pressure on observers, because they see them as an impediment to their usual fishing practices. In some cases things can turn very ugly. On average, at least one observer every year fails to return alive from a fishing trip in the Pacific islands; at least three observers from Kiribati alone have died in the past three years. Although the deaths of observers are frequently suspicious, there is rarely a prosecution, because of the code of silence on board the vessels and the time delay before reaching port so that a criminal investigation can be undertaken.

While Pacific nations can and do collaborate to set a consistent standard for fishing vessel operations in their economic zones, they are undermined by the lack of management in international waters, which cover 70% of the world's ocean. The UN Convention on the Law of the Sea has proved to be inadequate to enable sustainable management of fish stocks. The organisation Global Fishing Watch, https://globalfishingwatch.org/about-us/, tracks the movements of hundreds of thousands of fishing

vessels around the world and makes it freely available on the web. It's easy to see from their map that many of the distant water fishing vessels operating in the Pacific islands hover in international waters just outside the boundary of an economic zone, catching fish as they travel from one country's waters to another.

Foreign fishing vessels may also leave the waters of a Pacific island to unload their catch to a resupply vessel in international waters on the edge of the economic zone, without inspection and possibly without accurate reporting of the catch. Although many foreign vessels contribute significant income to Pacific countries through licence fees to fish in their waters, many more undermine the sustainability of the tuna resource by catching fish in international waters and not reporting accurately. The recall of fisheries observers during the Covid crisis will provide the opportunity for the less scrupulous operators to over-catch and under-report.

It may be possible in a post-Covid world, however, to achieve more sustainable global fisheries, including in the Pacific islands, if nations can agree on the need for better monitoring and management of fishing effort. There is an abundance of existing technology that enables the daily catch of every fishing vessel to be accurately recorded, even without observers, through a combination of onboard cameras, artificial intelligence, machine learning and satellite transmission of data. Such systems are in operation in the waters of developed countries all over the world. The New Zealand Government, for example, recently made it a requirement for vessels wanting to fish in the habitat of the world's most endangered dolphin, Maui's dolphin, to carry onboard cameras to monitor their activities. In the Pacific, there have been successful trials with onboard cameras and other monitoring and automatic reporting equipment, involving governments, NGOs and the fishing industry.

So, while trillions of dollars are being made available on land to cope with the Covid crisis, what's to prevent a far more modest outlay to protect our oceans and future-proof critical fish stocks by requiring all distant-water fishing vessels to carry functioning and tamper-proof monitoring equipment, and by requiring better onboard facilities and protection for observers? The fishing fleet operating in the Pacific islands has a large number of old vessels - it's time to upgrade them and reduce their number. Reducing fishing effort would help to move fish stocks to a generally healthier status, as would promoting the establishment of large Marine Protected Areas in international waters to provide safe havens for highly migratory fish species. In a 'new normal' era, it may be possible to reduce fish catches to a more sustainable level and reduce the by-catch of threatened species while at the same time keeping those fishing companies committed to a sustainable future in business, maintaining the level of contribution that fishing licences make to Pacific island economies, and providing safer and more comfortable jobs for observers, while technology takes care of the monitoring. With their management responsibilities for around 30 million square kilometres of ocean, Pacific island governments are in a position to take united and determined steps to insist that fishing in their waters is a privilege, that comes with responsibilities. Let's hope that enough decision-makers are able to implement some serious conservation measures in the coming months, before everyone sinks back into full-tilt exploitation of the ocean and its resources.

About the Author:



MICHAEL DONOGHUE

Michael Donoghue is a marine biologist who until 2018 was the Threatened and Migratory Species Adviser for the Secretariat of the Pacific Regional Environment Programme (SPREP). Formerly, he was a senior adviser for the New Zealand Government Department of Conservation on marine wildlife issues, including the bycatch of marine mammals such as Hector's and Maui dolphins and NZ sea lion in fishing operations. Prior to joining DOC in 1987, he was as a self-employed fisherman in the Hauraki Gulf, New Zealand for 7 years.