A brief from THE PEW CHARITABLE TRUSTS


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Protecting the Pacific

Important Pieces of the Regional Conservation Puzzle

The Pacific, Earth's largest ocean, is a complex ecosystem that supports life both at sea and on shore. Protecting this biodiversity is vital, which is why The Pew Charitable Trusts takes a comprehensive approach to ocean conservation in the Pacific region. Our goals include securing sustainable management for tuna populations, ending illegal fishing, protecting sharks, conserving biodiversity on the high seas, and ensuring a lasting ocean legacy by safeguarding some of the most special places in the ocean.

Although there is no "one-size-fits-all" approach to marine conservation, effective options are available that, with the right mix, can help create and sustain a healthy ocean. In every region, catch limits and gear regulations are essential management tools for fisheries. Closing off large areas to commercial activities can protect biodiversity, regenerate life, maintain a healthy balance within the ecosystem, and build resilience to change. New technologies can help fisheries managers with limited resources fight illegal fishing more effectively and monitor the health of coastal and marine ecosystems more efficiently. Equally important is the closing of loopholes in domestic and regional regulations that allow illicit fishing to go undetected and undeterred.

The economic, environmental, and food security that comes from a vibrant ocean requires strengthened fisheries management, elimination of illicit practices, and designation of new sanctuaries and marine reserves. Pew is working with countries across the Pacific to put in place the necessary measures needed to help shape a sustainable ocean future that best secures the region's short- and long-term needs. These are critical pieces needed to complete the ocean puzzle.

Sustainable fishing

The Pacific Ocean is home to the largest tuna fishing grounds in the world; nearly 65 percent of the annual global catch of tuna comes from this region. Populations of skipjack, yellowfin, bigeye, albacore, and bluefin are valued in the billions of U.S. dollars, making sustainable fishing an economic driver for many Pacific island states. The long-term viability of this sector is directly linked to food and financial security for people from Papua New Guinea to Kiribati to Fiji.

Global tuna conservation

The huge demand for tuna—as a popular ingredient in sushi and tuna steaks and as mass-produced, affordable canned fish across much of Europe, Asia, and the United States—has resulted in overfishing and mismanagement of some tuna species. It also has led to growing, unmanaged use of destructive fishing practices.

Catch limits

The key to the long-term sustainability of tuna populations is ensuring that we don't take too many fish out of the ocean too quickly and that we reduce fisheries' collateral damage on other marine species. Precautionary science-based catch limits can achieve that goal. A set of management rules, agreed to before overfishing occurs, can stop political gridlock from getting in the way of sustainable management.

Fishing gear management

Many fishermen use artificial floating objects known as fish aggregating devices (FADs) to attract and catch tuna. These objects must be regulated like any other fishing gear, but current management is insufficient and are leading to vast increases in fishing effort throughout the Pacific.

Each year, upward of 100,000 FADs are dumped into the ocean worldwide.[1] Many are never recovered and some wash up on coral reefs and beaches, creating an extraordinary marine debris problem. Pew is working in the Pacific to help the world's largest tuna fishery, which is managed by the Parties to the Nauru Agreement, to use satellite technology to track these objects. This technology will help fishery managers monitor daily use of FADs, improve the data available to scientists, reduce marine pollution, and monitor the impact of this fishing gear on associated and dependent species.

Protecting a decimated population

Pacific bluefin tuna is on the brink of collapse. The population has been reduced to just 4 percent of its original size, and more than 97 percent of these fish are caught before they can reproduce. But quick action now can reverse this situation and enable this majestic species to rebuild and recover. Adopting a coordinated, oceanwide rebuilding plan that includes catch limits and a minimum catch size could lead to a substantial increase in the numbers of Pacific bluefin tuna within just a few years.

Ending illegal fishing

Illegal, unreported, and unregulated fishing is a major threat to the sustainability of the world's fisheries. This activity accounts for up to US$23.5 billion worth of fish annually worldwide, and up to 20 percent of all of the wild marine fish caught globally, according to some estimates.[2] The percentage is even higher in the Pacific, where illegal fishing presents a clear threat to the economic and ecological security of Pacific Island nations.

Photo courtesy of Australian Fisheries Management Authority

Port State measures

Fisheries enforcement experts agree that strong, consistent controls for fishing vessels entering ports are needed to combat illegal fishing. Known as port State measures, these regulations are among the most cost-

effective methods for keeping illegally caught seafood from reaching the market. They also empower island states to act effectively when industrial fishing vessels enter their harbors. A number of regional fisheries management organizations (RFMOs) have strengthened port State controls in recent years. In other ocean regions, implementation of these measures, combined with timely information sharing, regional cooperation, and transparency of fishing activity, has helped authorities detect and stop illegally caught fish at the dock. Ratification of the United Nations Port State Measures Agreement so that it can enter into force would empower Pacific island states to take effective action against illegal fishing vessels.

Unique vessel identification numbers

Some RFMOs require fishing vessels to have unique, permanent identification numbers, similar to serial numbers on cars or mobile phones. Without this requirement, vessel owners and operators can quickly and easily change a vessel's name, radio call sign, or flag of registration and continue to operate illegally, even if they have been blacklisted by an RFMO. This policy gap makes it difficult for authorities to prove that a specific vessel has engaged in illegal fishing. Mandatory, unique, and permanent ship identification numbers, in accordance with the standards of the International Maritime Organization (IMO), would greatly increase the transparency of fishing operations and help authorities identify specific vessels and owners trying to conceal illicit activity.

Pew applauds members of the Western and Central Pacific Fisheries Commission and the Pacific Islands Forum Fisheries Agency for their recent decisions to require IMO numbers for registered fishing vessels and encourages both to implement these policies without delay.

Technology

Traditional tactics for at-sea monitoring, control, and surveillance of fisheries through aerial and surface patrols can be prohibitively expensive for many governments. New approaches based on advanced technologies, such as overlaying satellite imagery with other data, can be cost-effective and efficient ways to fight illegal fishing. To be successful, such methods must be carefully selected and used collaboratively across jurisdictions.

Pew's project to end illegal fishing is working to provide guidance on tools and technology to fisheries enforcement officials around the world. This technology work is part of our multifaceted approach to ending illegal fishing, which also includes advancing policy solutions and efforts to improve communication among coastal states and flag States.

Marine reserves

Research shows that very large, fully protected marine reserves are key to rebuilding species abundance, resilience, and diversity and to protecting the overall health of the marine environment.

Global Ocean Legacy

Global Ocean Legacy, a project of Pew and its partners, is working with local communities, governments, and scientists around the world to conserve some of our most important ocean environments. Together, we are establishing the world's first generation of great marine parks by securing the designation of large, highly protected reserves. Efforts in the Pacific are underway in New Caledonia, New Zealand (the Kermadecs), French Polynesia, the Pitcairn Islands, Easter Island, and Palau.

Palau: Creating a Sanctuary

Palau, located in the western Pacific, is world renowned for its healthy and incredibly diverse marine ecosystem. Home to more than 1,300 species of fish and 700 species of coral, the Micronesian island nation has been called one of the seven underwater wonders of the world.[3] Its nutrient-rich waters are teeming with sharks, turtles, manta rays, dugongs, and tropical fish.

Palau President Tommy Remengesau has committed to creating a national marine sanctuary that would fully protect up to 80 percent of the island nation's exclusive economic zone, an area the size of France. The sanctuary designation would end all industrial-scale fishing while allowing a domestic fishing zone for residents and tourists.

"We are not anti-fishing. We are pro-fishing sustainably," Remengesau said at the U.S. State Department's Our Ocean summit in June 2014. "Marine protected areas do work and should be enhanced."

Protecting ocean life on the high seas

The high seas—the international waters that lie beyond the jurisdiction of any state and cover some 45 percent of the Earth's surface—provide ecosystem services that are critical to supporting coastal communities worldwide, including the Pacific islands. These waters are home to a myriad of marine life, from the bacteria that inhabit the abyssal plains to the fascinating ecosystems that thrive around hydrothermal vents and deep-sea coral systems. Among their many benefits, the high seas sequester huge amounts of carbon dioxide, produce oxygen, and provide critical pit stops and way stations that migratory species use as they traverse the great ocean basins from spawning grounds to gathering places elsewhere. Further benefits await discovery as research uncovers the high seas' unique marine life and environments.

The high seas are at risk, however. An uneven patchwork of rules and regulations with many governance gaps provides few conservation safeguards to protect the species that thrive there from increasing commercial activities, such as fishing, oil and gas exploration, and deep sea mining. Proactive steps must be taken to conserve these species. At present, no legal framework exists to establish high seas marine protected areas and reserves or to require prior impact assessments for activities that might harm marine life in the high seas.

The United Nations Convention on the Law of the Sea (UNCLOS) requires countries to cooperate to conserve marine life in international waters, but there are no detailed rules on how that should be done. Nations need to agree to negotiate a new agreement to clearly spell out and put in practice the general principles reflected in UNCLOS so that the rules for operating on the high seas are clear, and some of these international waters can be fully protected. Such an agreement would help replenish and secure the well-being of marine life, both in the high seas and nearer to shore.

Pacific countries have been leaders in advocating for a healthy and resilient ocean. Their voices are critical in ensuring that the high seas continue to benefit all.

Protecting apex predators

Apex predators such as sharks play a critical role in maintaining the health of ocean ecosystems. Killing these species in large numbers can start a chain reaction in ocean food webs, affecting seabirds and commercially important fish species such as tuna and jacks.

Global shark conservation

Overfishing is taking its toll on many shark populations around the world, and the Pacific is no exception. In general, sharks grow slowly, mature late, and produce few young over their long lifetimes. That makes them especially vulnerable to overexploitation and slow to recover from depletion.

The demand for shark fins, meat, liver oil, and other products has led to declines in their populations worldwide. More than half of all shark and ray species are estimated to be threatened or near threatened with extinction because of overfishing.[4] Every year, about 100 million sharks are killed in commercial fisheries, an unsustainable number.[5] Regardless of whether this catch is unintended, unwanted, or highly sought after, the effect on ocean ecosystems demands urgent action.

Science now shows that sharks help maintain the health of coral reefs. And in addition to their ecosystem benefits, sharks provide economic benefits that make them worth more alive than dead in many areas. An

individual reef shark in Palau is estimated to have a lifetime value of US$1.9 million to the tourism industry. In contrast, the value of a dead shark is estimated at about US$108.

So far, six Pacific Island states covering more than 10.8 million square kilometers (4.2 million square miles) of ocean have declared their waters to be shark sanctuaries, where the commercial exploitation of sharks is illegal. In addition, all of the U.S. Pacific island states and territories, as well as all four states of the Federated States of Micronesia, have banned the sale, trade, and possession of shark fins. In 2013, members of the Association of Pacific Island Legislatures committed to establishing a Pacific-wide shark sanctuary, calling on all Pacific islands nations to end the unsustainable commercial fishing of sharks. Healthy oceans need sharks, and the leadership of Pacific Island countries that have been at the cutting edge of shark conservation globally are pointing the way for other nations and ensuring better ocean health for tropical coral reef systems across the region.


Alex Hofford/Greenpeace

Endnotes

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