Island Communities Cultivate Ocean Stewardship

Traditional knowledge and cultural heritage bring unique perspectives

Overview

Island communities around the world have strong ties to the ocean. The seas connect people to families and neighbors, provide sustenance, drive economies, and inspire art and cultural values.

Historically, island communities have harvested seafood from a bountiful ocean. However, these peoples face new challenges as unsustainable human activities worldwide take a toll on both ocean health and fish stocks. For example, the percentage of stocks fished at biologically unsustainable levels tripled between 1974 and 2015.[1] Marine debris pollutes massive areas, and carbon dioxide emissions are making the world's waters warmer and more acidic.[2] Populations of some top predatory fish species have declined by more than 90 percent from historic levels.[3]

Today, island communities, especially those in the Pacific Ocean, are combining traditional knowledge with science to develop innovative strategies to protect the ocean while bolstering local livelihoods and maintaining age-old practices.

Easter Island is world-renowned for its giant Moai statues, which serve as monuments to the Rapa Nui's rich culture.

Indigenous conservation strategies

Traditional knowledge and practices passed down through the generations increasingly inform modern marine management decisions as a complement to scientific data and recommendations.

Several islands and cultures across the Pacific share a conservation concept that calls for placing certain areas under protection and restricts how they can be used. This sometimes centuries-old approach is known by different names and cultural expressions. In Palau, it is called *bul*, while in Polynesian cultures it is called *rahui* or *lahui*. Elsewhere, the practice goes by other traditional words, such as *tapu, tabu, tambu, mo, meshung,* or *sil.*

These protections can be set in place permanently or for a defined period to allow an ecosystem to recover. They can be imposed in areas that hold sacred meaning or for other culturally important reasons, or in areas that have shown declines in health attributed to human activity.

The *bul* or *rahui,* therefore, is very similar to the modern idea of the marine protected area (MPA), a clearly defined geographical space that is recognized, dedicated, and managed—through legal or other effective means—to achieve the long-term conservation of nature.[4] Leaders at the local and national levels have taken somewhat different but conceptually similar approaches to putting these areas in place. For example:

- **Palau implemented a modern-day *bul* that puts the marine environment first.** Island chiefs on the archipelago nation in the Pacific have acted for centuries to protect the local waters that serve as a critical food source and provide the means for trade and income by enacting the traditional *bul*, a moratorium on fishing for key species or on specific reefs when confronted by the impact of overfishing. In 2015, President Tommy Remengesau Jr. applied this tradition to offshore areas for the first time when he signed the Palau National Marine Sanctuary Act. The protected area covers 80 percent of the country's exclusive economic zone, an area the size of Spain.
- **Papahānaumokuākea provides a model for global conservation.** The Papahānaumokuākea Marine National Monument in the Northwestern Hawaiian Islands is one of the largest MPAs in the world; it is as significant for its cultural value as its ecological benefits. Designated in 2006 by the U.S. government, the area's management integrates cultural knowledge and tradition, science, and modern policy to enforce safeguards for both natural and cultural resources.[5]

- **The Rapa Nui uphold indigenous culture.** The Rapa Nui community on Easter Island worked together with Chile's government to create a large MPA in 2018 that restricts nontraditional fishing activities and safeguards traditional fishing. Protecting these rich waters allows the local community to strengthen ties to the natural environment and seafaring ancestors.

The traditional, double-hulled seafaring canoes—Hōkūle'a (left) and Hikianalia—spent four years circumnavigating the globe starting in 2013 as part of a Polynesian Voyaging Society effort to promote sustainable stewardship of the natural world.

Island voices

As part of its work to establish a network of large-scale MPAs, the Pew Bertarelli Ocean Legacy Project brings together geographically and culturally diverse artists, educators, fishers, former government officials, and traditional voyagers with a shared interest in protecting the unique identities of their Pacific island communities. Together, this group is known as the Island Voices.

The members of this group advise Ocean Legacy in its efforts to work with small island communities seeking to create MPAs. Island Voices ambassadors hail from Palau, Guam, the Northern Mariana Islands, Hawaii, New Zealand, Australia, New Caledonia, French Polynesia, and Easter Island. The group focuses on collaborative efforts to maintain healthy oceans and facilitate lasting connections and learning exchanges.

Conclusion

The ocean belongs to all, and people around the world must work to protect it for future generations. For centuries, traditional island communities have developed simple but effective means to maintain and rebuild ocean health by establishing culturally significant protected areas. People elsewhere can learn from their experience and work in culturally appropriate ways—bolstered by well-established science—to establish large, fully protected MPAs. These areas can deliver tangible conservation benefits, secure long-term economic growth for local economies, aid the recovery of neighboring fisheries that benefit from the spillover effect, and uphold unique and diverse cultural traditions that are intrinsically connected to the sea.[6]

Endnotes

1 U.N. Food and Agriculture Organization, "The State of World Fisheries and Aquaculture: Meeting the Sustainable Development Goals" (2018), http://www.fao.org/documents/card/en/c/I9540EN.

2 Ove Hoegh-Guldberg et al., "The Ocean," in *Climate Change 2014: Impacts, Adaptation, and Vulnerability—Part B: Regional Aspects, Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change,* ed. Vicente R. Barros et al. (New York: Cambridge University Press, 2014), 1655-1731, https://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap30_FINAL.pdf.

3 International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific Ocean, "2016 Pacific Bluefin Tuna Stock Assessment, Executive Summary" (2016), https://www.iattc.org/Meetings/Meetings2016/SAC-07/PDFs/OTH-INF/_English/SAC-07-INF-C(a)_ISC-Pacific-Bluefin-Tuna-Stock-Assessment-Executive-Summary.pdf; Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Consideration of Proposals for Amendment of Appendices I and II" (2013), https://www.cites.org/sites/default/files/eng/cop/16/prop/E-CoP16-Prop-17.pdf.

4 International Union for Conservation of Nature World Commission on Protected Areas, "Applying IUCN's Global Conservation Standards to Marine Protected Areas (MPA)," accessed July 16, 2018, https://www.iucn.org/sites/dev/files/content/documents/applying_mpa_global_standards_final_version_050418.pdf.

5 Kekuewa Kikiloi et al., "Papahānaumokuākea: Integrating Culture in the Design and Management of One of the World's Largest Marine Protected Areas," *Coastal Management* 45, no. 6 (2017): 436-51, http://dx.doi.org/doi:10.1080/08920753.2017.1373450.

6 Fiona R. Gell and Callum M. Roberts, "Benefits Beyond Boundaries: The Fishery Effects of Marine Reserves," *Trends in Ecology & Evolution* 18, no. 9 (2003): 448-55, http://dx.doi.org/doi:10.1016/S0169-5347(03)00189-7; Hugo B. Harrison et al., "Larval Export From Marine Reserves and the Recruitment Benefit for Fish and Fisheries," *Current Biology* 22, no. 11 (2012): 1023-28, http://dx.doi.org/doi:10.1016/j.cub.2012.04.008.

For further information, please visit:

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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.