UN multilateral agreement offers an opportunity to protect high seas biodiversity

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The high seas—the expanse of ocean that lies beyond national jurisdiction—is a place few will experience, but it remains a source of wonder and imagination, much like the canopy of the Amazon and the continent of Antarctica. On 19 June, member nations adopted a legally binding instrument under the United Nations Convention on the Law of the Sea (UNCLOS) on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ), an area defined as the 60% of the oceans that lie beyond national exclusive economic zones, which are within 200 nautical miles (370 km) of coastlines.

Achieving a multilateral agreement in the 21st century is nothing short of a miracle, but the devil is in the details, and much of the agreement's strength or weakness is yet to be determined. After more than a decade of pressure by civil society groups, principally the Pew Charitable Trusts and Greenpeace International, formal negotiations among UN member nations began in September 2018. Just before the first meeting, *Science Advances* published a special collection on the science of the high seas (*1*). Hard copies were placed on the desks of every country's delegate.

As part of the negotiations, member nations agreed that the high seas treaty will become effective once ratified by 60 nations. At that point, there will at last be the legal framework for creating high seas marine protected areas (MPAs) to curb activities like industrial fishing and deep-sea mining. The treaty maintains that the definition of an MPA is to protect "long-term biological diversity." While it may seem obvious that a treaty about marine biodiversity would prioritize "long-term biological diversity," achieving that language was not easy. Likewise, the language "common heritage of mankind"—used in the UNCLOS and repeated in this agreement—was almost removed. In the end, "common heritage of humankind" prevailed, as did several other good things. Most notably, the monetary and nonmonetary sharing of benefits from marine genetic resources and equity-driven language for capacity building and transfer of marine technology with full recognition of the requirements of developing states.

In a positive turn, decisions about protection will be decided by a two-thirds or three-quarters majority of the UN, depending on the kind of decision. Given the proposed alternative of full consensus—the model used by the infamously failing regional fisheries management organizations (RFMOs) that currently attempt to govern fishing on the high seas (*2*)—the majority-based process was a welcome approach.

However, as with the Paris Agreement on climate change, success or failure will ultimately rest on the actions of individual countries, particularly given the loopholes in the agreement. One loophole is the opt-out clause for MPAs. Buried in the article on decision-making is language that allows a member state to present an objection providing reason that the state cannot comply with the MPA or management tool. The objection presented to the secretariat will explain how the MPA is inconsistent with BBNJ goals, discriminatory, or impractical. It remains unclear what will happen if a state's objection is found unacceptable, but if the objection is approved, the MPA or spatial management tool would no longer be legally binding for the objecting state.

Member states also decided that "potentially" destructive activity in the high seas will require environmental impact assessments (EIA), but instead of being legally binding, comprehensive, and standardized, EIAs will be state-led, an obvious concession to deep-sea mining interests. One of the biggest concerns is the treaty's use of the word "undermine." This agreement cannot undermine other global or regional bodies, which includes RFMOs and the International Seabed Authority (ISA)—the very same institutions that led us to the crisis point of needing stronger protections [e.g., (*2*)].

As with UNCLOS, the United States was visibly involved in the negotiations as part of a "high ambition coalition" and in drafting of the language of the agreement. Now, the pressure should be on the United States to ratify the agreement, as well as to continue to be ambitious about the creation of high seas MPAs, rather than to object to them. The United States has not ratified UNCLOS. However, similar to the country's participation in the 1995 UN Fish Stocks Agreement, the United States could nevertheless become a party to the BBNJ Agreement.

To reiterate from our introduction to the high seas special collection (*1*), "institutions and governments do not have adequate tools to keep pace with those who work to overexploit the high seas." Building democratic will and consensus takes time, and private interests aimed at exploitation can operate quickly. We will need tools beyond any formal agreements. In the search for more levers for protection, it may be advantageous to conceive of responsibility in different ways, including national policies aimed at the corporate bad actors who benefit from exploiting the high seas, as well as consumers of high seas products.

A multilateral agreement for the high seas is a miracle, but it nevertheless has left many longing for more radical action. Brooks *et al.* (*3*) called for a moratorium on fishing in Antarctica. Others have called for closing the high seas altogether, including biologist Daniel Pauly and economist Rashid Sumaila when they won the international Tyler Prize for Environmental Achievement earlier this year. Legal scholars and political scientists have explored options for closing the high seas (*4*, *5*). A moratorium on commercial whaling by the International Whaling Commission was also unthinkable at one point but now has been in force for almost 40 years. Perhaps this new agreement will make it more possible to imagine and implement a more positive future for biodiversity on the high seas.

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REFERENCES

1. J. Jacquet, J. Jackson, Eds., Science of the high seas, special collection. *Sci. Adv.* (2018); www.science.org/collections/science-of-the-high-seas.
2. S.Cullis-Suzuki, D.Pauly, Failing the high seas: A global evaluation of regional fisheries management organizations. *Mar. Policy* **34**, 1036–1042 (2010).
3. C. M.Brooks, D. G.Ainley, J.Jacquet, S. L.Chown, L. R.Pertierra, E.Francis, A.Rogers, V.Chavez-Molina, L.Teh, U. R.Sumaila, Protect global values of the Southern Ocean ecosystem. *Science* **378**, 477–479 (2022).
4. K.Wyman, Unilateral steps to end high seas fishing. *Tex. AM Law Rev.* **6**, 259–296 (2018).
5. J. F.Green, B.Rudyk, Closing the high seas to fishing: A club approach. *Mar. Policy* **115**, 103855 (2020).

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