Whitewashing ‘Blue Food’ Won’t Make the World More Green

Recent public messaging encouraging people to eat more seafood conveniently omits information about the environmental impact of fishing.

Marine wildlife is in a state of global emergency. Ninety percent of fish populations are at or below half their historical levels, and more fish species appear on the International Union for Conservation of Nature’s red list of threatened species than any other class of animals. Since 1970 alone, global shark and ray populations have declined by more than 70 percent. The vaquita porpoise will be extinct in a matter of years, with the Māui dolphin and North Atlantic right whale likely following close behind. The primary driver of this aquatic extinction crisis is not climate change or plastic pollution but fishing, and conservation biologists around the world have warned that addressing this crisis requires overhauling traditional notions of fisheries management and implementing significant restrictions on catch limits.
ABOUT

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Recently, however, calls have emerged not for less fishing, but more, under the banner of a new term encompassing all seafood and aquaculture products: “blue food.” The Blue Food Alliance, launched ahead of the UN Food Systems Summit, has brought together academics, policymakers, and corporate donors focused on increasing the consumption of sustainable seafood. The project was introduced with much fanfare, including a set of papers in the journal Nature Food, an editorial in its parent journal Nature, a number of well-placed op-eds by important academics and members of industry, and even a promotional video. According to the group's report, titled “The Blue Food Assessment,” seafood and aquaculture often have lower environmental impact and provide greater nutritional benefits than terrestrial foods while contributing to food security, making it economically and ecologically sustainable.

But this blue-food narrative relies on generalizations and omissions that obscure the facts about the impacts of seafood. Just as harmful industries such as Big Oil and Big Livestock have promoted superficial production tweaks and embraced the language of sustainability, so too has the seafood industry. While the Blue Food Alliance boasts the membership of sustainability nonprofits like EAT, it also includes seafood titans like the Walton Family Foundation. As countless unsustainable industries claim to go green, public messaging on blue food bears all the hallmarks of a branding pivot—call it a “bluewash.”

IT’S NOT THAT the message of this campaign and others like it are predicated on bad science, it’s that they deploy scientific claims selectively. In doing so, “The Blue Food Assessment” omits many of the harms of fishing and fish farming, and makes it seem far more sustainable than it actually is. Take the idea that consuming seafood is generally more environmentally friendly than eating land-based meat. To substantiate this, the authors use sustainability metrics from previous studies to score the greenhouse gas, nitrogen, and phosphorus emissions, as well as land and fresh water use, of various seafood and aquaculture products. This leads to the conclusion that these foods’ environmental impacts are lower than those of many agricultural products, particularly chicken, the least environmentally impactful industrially raised meat. The problem is that this is an apples-to-oranges comparison—it applies criteria designed for terrestrial agriculture to the oceans, while omitting environmental impacts specific to marine life. Eating wild fish may use virtually no land or freshwater, but it also depletes marine life populations, disrupts food webs, dredges up reefs and algal beds, and litters the ocean with ghost nets. The report is equally selective in its discussion of the health benefits of seafood. Fish may be rich in various vitamins and dietary minerals, but it can also be laden with microplastics and bioaccumulative toxins such as PCBs, PBDEs, and mercury. While these various shortcomings are acknowledged in some of the blue food manuscripts, they are all but absent from promotional materials, overstating the benefits of blue food while underplaying its shortcomings.

Specific claims aside, the nomenclature in this campaign is also concerning. While lumping all marine foods into the new category of “blue food” does little to facilitate comparison to other food groups, it does quite a bit to conflate species- and region-specific impact assessments. For example, while advocates boast that “the BFA assessment emphasizes the enormous diversity of blue foods,” the data are actually quite vague, with wide margins of error and broad categorizations like “miscellaneous marine fishes.” Even more problematically, this tactic also obscures the different producers and production processes within the seafood industry. For one thing, although it doesn’t explicitly advocate expanding industrial fishing, it is effusive about growing industrialized forms of fish production like aquaculture. But aquaculture does not take pressure off wild fisheries as much as it complements them, often requiring hundreds of wild-caught bait fish to feed a single farmed salmon or tuna. It also brings with it a range of risks and harms, including effluent...
pollution, mangrove deforestation, and viral proliferation both within aquaculture farms and spreading to wild fish. Yet “The Blue Food Assessment” recommends expansion of aquaculture despite these risks.

Even as they push for more aquaculture, blue food proponents do raise legitimate concerns about seafood being central to many cultures, food systems, and economies, especially among coastal communities in the Global South. However, while the BFA states that small-scale fishers haul in “over half the world’s fish catch,” reports indicate that subsistence fisheries account for less than 3 percent of the global catch and so-called “artisanal” fishing for another 20, meaning that three-quarters comes from industrial-scale operations like trawlers, seiners, and longliners that are widely condemned as unsustainable. By conflating industrial fishing practices that feed high-end consumers with subsistence fishing traditions, the blue food category creates needless confusion about the specific needs of coastal communities.

This follows a long history of using humanitarianism to disguise exploitation by the fishing industry. The Blue Food Alliance invokes human rights in the context of nutrition, but it omits the impacts of the aquaculture and fishing industries on marginalized peoples. Its press materials feature images of subsistence fishing communities hanging their catches to dry on modest clothing lines and selling them in hand-weaved baskets, a common marketing angle for seafood, used heavily by sustainability certification programs such as the Marine Stewardship Council. A recent analysis found that the MSC featured small-scale, low-impact fishing methods in roughly half of its promotional content, despite these methods representing only 7 percent of the products it certified.

The reality is that traditional fishing communities are the ones that suffer most from the impacts of the global fishing industry. But in “The Blue Food Assessment,” you won’t find photos of West African artisanal fishermen drowning in deep water after collisions with illegal supertrawlers, Salish chiefs decrying the cultural genocide of industrial herring extraction, or the tens of thousands people enslaved on up to a quarter of the global fishing fleet. The seafood industry wants its consumers to associate seafood with modest subsistence fishing traditions, but the truth is that the vast majority of seafood—and especially that which is sold in industrialized nations—is obtained by methods that pose a direct threat to those ways of life.

WHILE THE DISCOURSE around sustainable seafood can be heated, there are still fundamental solutions on which conservation biologists and fisheries scientists agree. As the renowned fisheries scientist Daniel Pauly puts it, “Fisheries issues are not difficult or intractable problems. We need to fish less and to create sanctuaries where fish populations can revive.” While policy should protect the food security and economic viability of coastal communities, especially in the Global South, it also must massively reduce subsidies and permits for both fishing and aquaculture and expand marine reserves to protect our marine ecosystems. Consumers should also be aware of the major impacts associated with consuming species like tuna at the top of food chains or those like crabs that live in sensitive ecosystems on the ocean floor, and realize that farmed fish aren’t necessarily low-impact either. Notably, the only “blue foods” with negative emissions impacts aren’t fish at all, but farmed algae and bivalves. However, the biggest environmental benefits of outplanting these species might be as building blocks for rewilding coastal ecosystems, which is also one of our most effective tools for drawing down atmospheric carbon. The truth is, transitioning to a sustainable food system will require people in industrialized nations to eat far fewer animals, both farmed and wild, terrestrial and aquatic.

However, rather than clarifying these diverse environmental stakes, the “blue food” narrative risks muddying the waters of the seafood sustainability debate by suggesting to consumers that a deeply destructive industry is actually sustainable, perhaps as an environmentally friendly alternative to factory-farmed meat. But it’s not that simple. The main beneficiaries of this sort of discourse are the big players in the fishing industry, who escape direct critique and benefit from a bluewashing bonanza that lifts all boats.
While the science underlying "The Blue Food Assessment" is reputable, its lens is narrow, removing blue food from the ecological context it comes from. The blue parts of our planet cycle our nutrients, stabilize our climate, produce half the oxygen in the air we breathe, and provide a home to millions of marine species—functions we risk disrupting if we value them simply as a source of food.

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