What Netflix’s Seaspiracy gets wrong about fishing, explained by a marine biologist

Giving up seafood isn’t the best way to save the oceans.

By Daniel Pauly | Apr 13, 2021, 8:50am EDT

Seaspiracy takes the issue of the devastating impact of industrial fisheries on life in the ocean and then undermines it with an avalanche of falsehoods, argues scientist Daniel Pauly. | Courtesy of Sea Shepherd

This story is part of Down to Earth, a new Vox reporting initiative on the science, politics, and economics of the biodiversity crisis.
I wanted to like *Seaspiracy*, the recent Netflix documentary that has lots of people talking about the damage that industrial fisheries inflict on the oceans and our souls. Since premiering on March 24, the movie has made its way onto (and off) Netflix’s Top 10 watch lists in a number of countries, and everyone from Tom Brady to Wells Fargo analysts have weighed in.

For decades, I have been writing and speaking about the damage *Seaspiracy* depicts in *scientific articles, interviews*, and yes, in *documentary films* as well. While much progress has been made, far too many people still have no idea of the problems facing the oceans. So, the prospect of a popular film on Netflix that could make the threat of destructive fisheries meaningful for its 200 million subscribers is something I welcomed.

The film includes all the damning evidence and dramatic footage required to make the important point that industrial fishing is — throughout the world — a too often out-of-control, sometimes criminal enterprise that needs to be reined in and regulated. In this, it reinforces and shares with a wide audience a knowledge that is widespread in the ocean conservation community, but not in the public at large.

However, overall *Seaspiracy* does more harm than good. It takes the very serious issue of the devastating impact of industrial fisheries on life in the ocean and then undermines it with an avalanche of falsehoods. It also employs questionable interviewing techniques, uses anti-Asian tropes, and blames the ocean conservation community, i.e., the very NGOs trying to fix things, rather than the industrial companies actually causing the problem.

Most importantly, it twists the narrative about ocean destruction to support the idea that we — the Netflix subscribers of the world — can save ocean biodiversity by turning vegan. In doing so, *Seaspiracy* undermines its tremendous potential value: to persuade people to work together, and push for change in policy and rules that will rein in an industry which often breaks the law with impunity.
Seaspiracy breezily uses anti-Asian tropes to make its points. | Seaspiracy, Courtesy of Ali Tabrizi

**Seaspiracy’s problem with facts**

First, *Seaspiracy* has a problem with facts. An example is its claim that the oceans will be “empty” by 2048 if we keep fishing as we do now.

This claim is a misinterpretation of a now-dated research paper. Its authors had suggested that by 2048, all the world’s exploited fish populations would be so depleted by fishing that they would yield less than 10 percent of their historically highest catches. There are thousands of such fish populations throughout the world, which can be considered to have “collapsed,” but they are not gone, and they can recover. In fact, this is what current fisheries management in countries such as the US, which emphasizes stock rebuilding, is often about.

Another example is the confusion the film sows around fish **bycatch and discards**. The former are fish and other wildlife caught without having been targeted, and the latter are fish and other animals that are discarded after being caught.

Discards currently make up about 10 percent of the world’s catch, which is obscene when billions of people are food insecure. But this is also much lower than the 48 percent claimed in the film. That 48 percent, instead, is the bycatch rate, most of which consist of fish that were taken to market, although fishermen did not intend to catch them.

Yet another misleading claim in the film is that ocean plastic pollution consists mainly of lost or discarded fishing gear. This may have been true in the 1980s, particularly in the
North Pacific, where the first studies of marine debris were conducted.

Nowadays, **about 80 percent** of plastic in the oceans comes from what we throw away on land: soda bottles, food packaging, tires, and so forth, while **20 percent** comes from marine sources. Abandoned fishing nets — also known as “ghost nets” — are a real source of marine debris. But, it’s problematic that the filmmakers characterize attempts to reduce land-based ocean plastic pollution as trivial. They are not.

The most glaring factual error is the film’s claim that sustainable fishing does not exist. In fisheries science, we use the term **maximum sustainable yield (MSY)**, which determines the maximum catch that can be sustainably extracted from a fishery.

While there are too many examples of unsustainable fishing around the world, there are also **well managed** fisheries that rely on data and science. These fisheries — which include European hake and yellowtail flounder on the Grand Banks in New England waters — can and do rebound to become sustainable and abundant.

**Giving up seafood won’t save the oceans**

But my main problem with *Seaspiracy* is that its makers want us to believe that not eating fish is the central way we should go about fixing the problems that industrial fishing creates for the oceans.

To opt for vegetarianism and veganism is a very respectable position, and it may (have to) become a majority decision in the coming years, to limit the climate crisis as well. But right now, this is a position that only a small fraction of the population of wealthier countries will take.

When you decide on an absurd policy, you must knock down the alternatives, however sensible they might be. And so, *Seaspiracy* attacks several of the NGOs in ocean conservation, including the Plastic Pollution Coalition and Oceana.

Disclosure: I have sat on Oceana’s board since it was founded. It has played a key role in advocating for policies that would impose limits on industrial fisheries, such as helping the World Trade Organization abolish the huge **subsidies** that industrial fisheries still receive from governments. It has also led successful efforts to **fight seafood fraud** and **illegal fishing** through robust traceability programs.

**Asian people are not the enemy of ocean conservation**
Another major problem I have with this film is how breezily it uses anti-Asian tropes to make its points. In this movie, everyone who is Asian is seemingly a villain: There is a Japanese fisher brandishing a knife as he approaches the camera, a shop owner shooing away the film’s narrator from his Hong Kong store, or the badly concealed and obviously Asian seafood trade show rep. This is in contrast to the overwhelmingly white Western defenders of the oceans, presented as experts or heroes astride their impressive ships.

I have lived in the Philippines for two decades and worked throughout Southeast Asia, and I know many ocean advocates there who are literally risking their lives to push ocean conservation forward. The plight of our oceans isn’t a new discovery for them, and it isn’t an Asians-versus-Westerners battleground. They are fighting to defend the right and ability of their communities to catch fish today and for generations to come.

Ultimately, this is a movie that forces the problems of global fisheries through a small, privileged lens to make the Europeans and North Americans who can give up fish feel guilty enough to do so. Unfortunately, much of the other 85 percent of the planet will continue to eat fish because many will not even know about, nor be able to afford, a wholesome vegan diet.

The message I wish the filmmakers had conveyed instead is that pushing for legislative changes and improved enforcement of existing laws is the best way to get involved. Just like the fight against tobacco in enclosed public places was won by smoking bans, and not by appeals to smokers, the fight against illegal fishing and the other shenanigans of the fishing industry will be won by political actions directed at governments, not appeals to vegans in New York, London, or Vancouver.

Governments make the decisions that shape the oceans, and 90 percent of the global fish catch is governed by just 30 countries and the European Union. Better policies can rebuild fisheries. The problem we face, really, is that not enough people are involved and helping to push for better decisions and better policies.

If Seaspiracy has made you aware of the problems facing the oceans, take action and join a NGO that’s fighting for change. As for this film, a better title would have been Marie Antoinette Goes To Sea.

Daniel Pauly is a marine biologist, fisheries scientist, and professor at the University of British Columbia and a member of the board of directors of Oceana.
Vox turns 7 this month. Although the world has changed a lot since our founding, we’ve held tight to our mission: to make the most important issues clear and comprehensible, and empower you to shape the world in which you live. We’re committed to keeping our unique journalism free for all who need it. Help us celebrate Vox’s 7th birthday and support our unique mission by making a $7 financial contribution today.