

Climate change conflicts are here – and 'scallop wars' are just the beginning

September 10 2018, by Heather Alberro



Credit: AI-generated image ([disclaimer](#))

As the planet warms, species are [moving further north](#) to climate zones which are closer in temperature to what they originally evolved in. The [oceans have absorbed](#) most of this temperature increase, and so many marine species, including commercially fished scallops, are under particular stress to migrate northwards to cooler waters.

In the face of this disruption, legal boundaries for fishing fleets could become increasingly irrelevant. As the fish stocks they once contained move out, conflict is likely to arise between countries exploiting neighbouring fishing grounds.

As a result, the ongoing "[scallop war](#)", which has seen tense physical confrontations between French and British [scallop](#) fishers over access to these prized molluscs, may be a taste of worse to come.

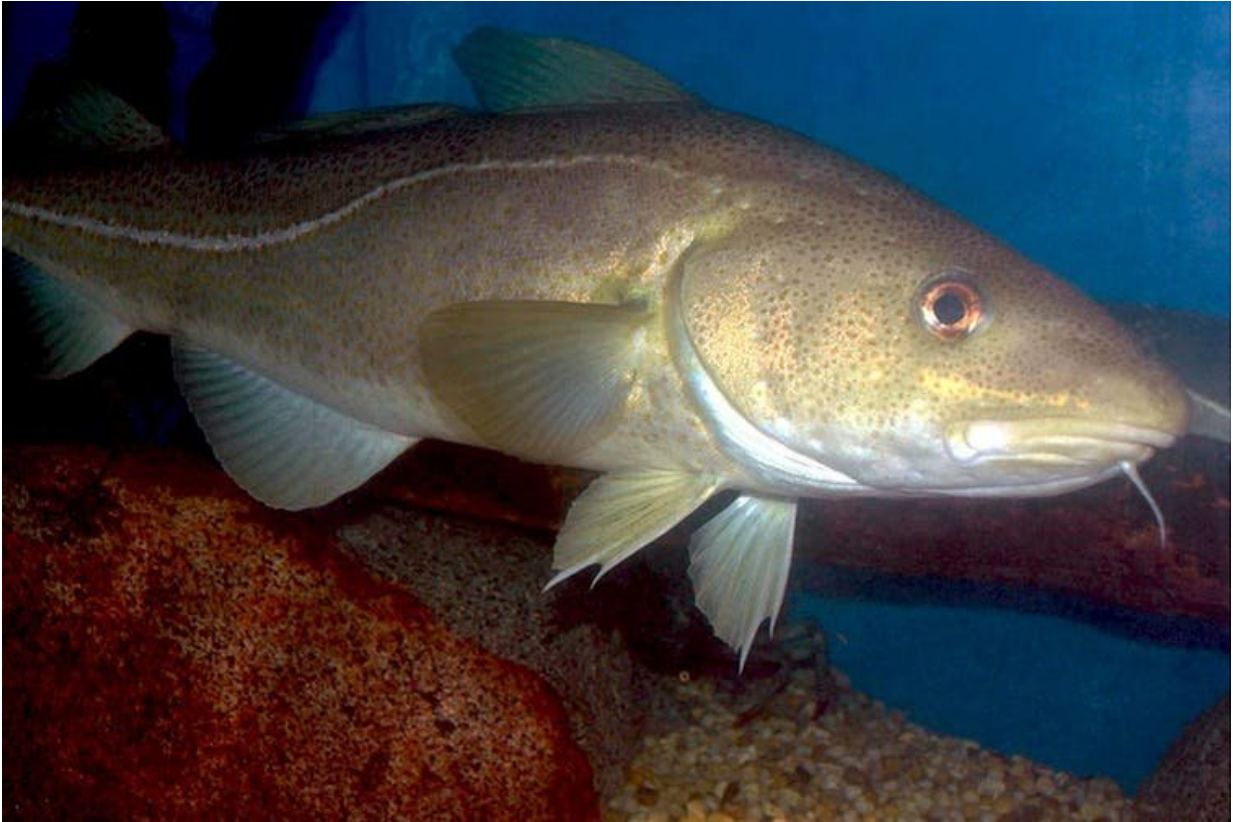
Shellfish behaviour

The habitat ranges and migration patterns of commercial species in the ocean have been [carefully studied throughout history](#), so that fishing fleets can exploit them more efficiently. This understanding has informed the division of fishing grounds according to who has the right to harvest them.

French scallop fishers were incensed over their British counterparts' alleged [pillaging](#) of scallop stocks, as smaller British boats aren't bound by a French law that prohibits dredging in the Baie de Seine from October 1 through May 15, to allow scallop populations to recover.

While on the surface it might seem that these skirmishes are anchored to specific circumstances – potentially inflamed by existing tensions around Brexit – they highlight the enormous difficulties in clearly mapping and enforcing legal boundaries around natural habitats that are changing rapidly.

These disputes over resources such as food will become more frequent and intense as climate change alters the habitats and material conditions of life on Earth.



Atlantic cod (*Gadus morhua*) populations are heavily exploited and under pressure to migrate northwards with climate change. Credit: [NOAA Fisheries](#)

Fisheries in flux

Managing marine resources like fish has always been tricky. Each species responds differently to changes and pressures in its environment, making it difficult for anyone to predict exactly where they will be, when or how far they will migrate, and how many remain. Climate change has introduced new uncertainty.

The effects of rising temperatures, though variable across species, have already begun to alter the [sizes](#), [distribution](#), and food web interactions of marine organisms. Warming seas have led to an overall [northward](#)

[movement](#) for many species, some at a pace of 2.2 kilometres per year. This includes commercial species such as the [Atlantic cod](#), a trend that is observable [among land-based animals](#) as well.

More carbon dioxide in the atmosphere means more of it dissolves in the ocean, making seawater more acidic. This process, known as [ocean acidification](#), is making it difficult for species such as scallops to grow their tough calcium-carbonate shells, threatening their growth and survival.

On top of all of this, we're taking from the ocean more than it can replenish. Currently [over 90%](#) of large commercial fish species such as tuna and cod have already been caught, and over 70% of the world's fisheries range from "significantly depleted" to "fully exploited". Species unable to adapt to this pressure are likely to decline or even disappear.

Building bridges over troubled water

If the scallop wars end soon, [climate change](#) will continue to disrupt marine ecosystems and render political boundaries increasingly outdated. We will need to have a radical rethink of who should have rights to what, who is to have the authority in managing important areas and resources, and what constitutes a truly sustainable harvest.

Greater communication and collaboration between fishers, policymakers, researchers and the wider public will become essential for navigating the troubled waters ahead.

Perhaps it is also time to take the interests of other [species](#) into consideration in this process, by viewing the natural world and non-human life as more than mere resources or a backdrop to the unfolding human drama.

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Provided by The Conversation

Citation: Climate change conflicts are here – and 'scallop wars' are just the beginning (2018, September 10) retrieved 17 July 2024 from <https://phys.org/news/2018-09-climate-conflicts-scallop-wars.html>

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