How the COVID-19 pandemic is affecting marine ecosystems, Part 1: Fisheries and aquaculture

Editor’s note: The COVID-19 pandemic is dramatically affecting the lives of many, if not most, of Skimmer readers right now, and it may herald some broad societal changes in the coming years. For the next few months, The Skimmer will take a look at the various ways that the pandemic is affecting marine ecosystems and their conservation and management. We will do this in installments published every 1-2 weeks. In this issue, we take a look at how fisheries and aquaculture are being affected by the pandemic. We will update previous installments of our coverage, so if you see critical aspects that we are missing, please let us know at skimmer@octogroup.org. Many thanks to the EBM Tools Network for some early tips on what was happening at the docks.

“The biggest crisis to hit the fishing industry ever”

- Fisheries and their attendant industries and communities across the globe – ranging from European to UK to South African to Indonesian to North American – are being devastated by problems starting fishing voyages, decreases in demand from large-scale buyers – particularly restaurants, and the shutdown of exports to Asia – particularly China. The head of the Pacific Coast Federation of Fishermen’s Associations called the COVID-19 pandemic “the biggest crisis to hit the fishing industry ever.”

- In some countries, fishing vessels are stuck in port due to measures intended to decrease the spread of COVID-19 while in others countries lack of demand for product, border closings, and trouble gathering crews and supplies are keeping fishers at home. Satellite data suggest that fishing activity has decreased dramatically – as much as 80 percent – in China and West Africa. Offshore fleets that can spend extended periods of time at sea because they can process and freeze fish at sea and/or offload catch to transshipment vessels seem to be maintaining effort, however.
Sales and prices for premium seafood products that are generally sold to restaurants – such as lobster, crabs, scallops, and wild salmon – have been hit particularly hard. US Maine lobster, which would normally sell for $10 a pound (boat price) at this time of year, is currently selling for under $3 a pound.

Many grocery stores have shut down their fish counters and are only selling the most popular, prepackaged seafood items to make restocking easier and satisfy demand for less perishable products. Fishing groups are starting to explore ways to increase direct sales of fresh seafood to consumers but current direct-sale markets and supply lines are insufficient to deal with the mass quantities of fresh seafood that are now available.

Pandemic stories from the fisheries sector highlight the intense globalization and complexity of the seafood trade. Many countries, such as the UK, Canada, and the US export most of the catch from their domestic fisheries while importing most of the seafood that their residents eat. (Some catch is exported to take advantage of lower labor costs for processing fish and then reimported.) These complicated trade patterns are a massive liability to the industry as the pandemic shuts down normal trade routes.

Even as nations start to relax measures to prevent the spread of COVID-19 and open businesses and industries, safety concerns may continue to dog the seafood sector. Fishing vessels and crowded seafood processing facilities do not easily allow for physical distancing, and both commercial and recreational fisheries are potential vectors of COVID-19 to remote communities.

As with other environmental issues, the impacts of the pandemic on fisheries depend on local circumstances. Some Kenyan fishers are experiencing a temporary boost in sales and prices as local buyers switch from frozen Chinese fillet imports to local catch from Lake Victoria. This boom is unlikely to be long-term, however, because Kenya typically only produces a third of the fish that it consumes, relying on China for much of the difference. Restrictions on imports from China may soon lead to more widespread protein shortages for the country.

Similar shortages of aquatic foods and increases in prices are likely to occur in many other areas, harming poor consumers who depend on seafood for protein and essential micronutrients.

And, in general, already vulnerable and marginalized small-scale fishers and the industries and communities that depend on them (e.g., fish vendors and fish processors) are likely be devastated by the pandemic as their access to coastal areas is restricted and fish markets are affected by shutdowns. There is relatively little news coverage of the impact of the pandemic on small-scale fishers, and Too Big To Ignore (a global research partnership) and the Ocean Frontier Institute are currently working to document how the pandemic is affecting small-scale fishers.

The extent of the COVID-19 pandemic on recreational fisheries is not yet clear, but some recreational fisheries, including all recreational fisheries in the Mediterranean, have been closed.

For some fisheries, decreases in fishing effort from commercial and recreational fisheries for an extended period of time could allow marine stocks to recover. If fishing effort stopped for a full spawning cycle, the biomass of some species, such as herring, could nearly double. However, the pandemic is also having some negative impacts on fisheries sustainability and management.

In some areas, fishing pressure is increasing on species that are commonly canned or frozen e.g., small pelagics and tuna.
Leading seafood sustainability rating organization Seafood Watch has had to substantially reduce its workforce through layoffs and furloughs.

Marine aquaculture is being affected by many of the same factors as fisheries, including lack of demand for fresh seafood and trade restrictions. In addition, fish farmers are incurring expenses to continue feeding stocks that they are not harvesting and they are running into problems importing brood stock.

What else might the future hold for fisheries? A thought piece from the Center for Strategic and International Studies suggests some possibilities:

- The reshoring of fisheries processing to avoid trade restrictions associated with the pandemic
- Upticks in IUU fishing due to decreased monitoring
- Increased transshipments at sea to enable longer trips to deal with restricted access to ports and decrease the likelihood of COVID-19 transmission to crews
- Increases in human rights violations, including possible marooning of crew members displaying symptoms of disease.

The UN Food and Agricultural Organization has a host of recommendations for mitigating the impact of the COVID-19 pandemic on the fisheries and aquaculture sectors and seafood consumers. Some recommendations include:

- Government purchases of excess seafood supply for institutions such as prisons
- Restricting fishing to levels that match demand to keep prices level
- Direct financial assistance to fishing vessel owners and crews
- Increased access to credit programs and loan forgiveness for seafood industry businesses
- Reducing trade restrictions on food items
- Increasing remote monitoring and surveillance of fishing activity.

Are there other ways the COVID-19 pandemic is affecting fisheries? We will be updating previous installments of our COVID-19 pandemic coverage, so if you see critical aspects that we are missing, please let us know at skimmedoctogroup.org.