

I'm so over COVID-19...20...21...

As the West Coast fishing industry, coastal communities, and the entire nation reeled from the devastation of COVID-19, the NOAA Fishery Science Centers were not immune. Surveys were cancelled, and of those that continued, many were understaffed. The good news is that many of the long-standing data series produced by these surveys are robust to a single-year variation and most ecosystem and stock assessment analyses are still able to provide valuable information. Also, NOAA Science Centers across the nation were able to use remote sensing technologies like buoys, drones, and gliders, and innovative statistical approaches to fill data gaps. It should be noted, however, that while technologies offer advances in data collection and are decidedly cool, they cannot replace human data collection in all cases.

La Niña to the rescue (for now)

The Habitat Compression Index, developed by NOAA, is showing values that are better for ecosystem productivity. This index describes how "compressed" the band of productive upwelled water is against the shore, which depends on the presence of offshore oceanographic factors. Upwelled habitat continues to expand coastwide since 2015, albeit slowly and close to the long-term average, and the recent shift to La Niña conditions appears to have kept a blob-sized heatwave from coming inshore. La Niñas have historically led to low rainfall totals in California though, which is bad news for those parts of California currently under drought conditions, and pyrosomes continue to be a challenge in central and northern California.

The Theil deal

This year's report introduces an updated indicator that examines revenue consolidation by port. Using the Theil Index, a measurement used by the United Nations to understand economic inequality globally, it illustrates changes in the distribution of revenue over time. When all fisheries are summed, we see relatively stable revenue coastwide, but there is high variability and some emerging trends at the fishery level. Related, 2020 was an example in resiliency and creativity by fisherman and communities to quickly adapt their fishing and business models to COVID; next year's State of the CA Current Report should show some interesting developments.

A walk in the bark

Sea lion pup growth is an excellent indicator of forage quality and abundance. In 2020, aerial surveys were conducted and showed a continued trend of above-average counts from a low in 2015/2016. This is good news for ecosystem productivity and corresponds with other ecosystem indicators that show an increasing forage base and overall system productivity such as improved zooplankton indicators, abundant anchovies, high YOY sablefish, and upwelling. Good pup counts likely translate into more adults in the coming years so look for happy sharks but also a possible increase in human interactions.

A busy intersection of (salmon) stoplights

Expanding on existing salmon stoplights, this year's report features individual tables for Central Valley, Sacramento River and Klamath River populations. Across all three, conditions were fair to poor, with continued unfavorable freshwater habitat for Klamath River Fall Chinook raising concerns for future returns and illustrating the ongoing need to improve and restore freshwater habitat.

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