### IdeaFest: Interdisciplinary Journal of Creative Works and Research from Humboldt State University

Volume 5 Article 10

2021

## Exploring the Effects of the Coronavirus (COVID-19) Pandemic on Fishing Communities and Fisheries Social Science Research in California

Samantha Cook
Humboldt State University

Mikayla Kia Humboldt State University

Follow this and additional works at: https://digitalcommons.humboldt.edu/ideafest

### **Recommended Citation**

Cook, Samantha and Kia, Mikayla (2021) "Exploring the Effects of the Coronavirus (COVID-19) Pandemic on Fishing Communities and Fisheries Social Science Research in California," *IdeaFest: Interdisciplinary Journal of Creative Works and Research from Humboldt State University*: Vol. 5, Article 10. Available at: https://digitalcommons.humboldt.edu/ideafest/vol5/iss1/10

This Article is brought to you for free and open access by the Journals at Digital Commons @ Humboldt State University. It has been accepted for inclusion in IdeaFest: Interdisciplinary Journal of Creative Works and Research from Humboldt State University by an authorized editor of Digital Commons @ Humboldt State University. For more information, please contact kyle.morgan@humboldt.edu.

# Exploring the Effects of the Coronavirus (COVID-19) Pandemic on Fishing Communities and Fisheries Social Science Research in California

Samantha Cook (Humboldt State University), Mikayla Kia (Humboldt State University)

### Introduction

The coronavirus (COVID-19) pandemic has disrupted daily life for individuals and communities around the world (Kumaran et al. 2021). Reports from the early months of the pandemic indicate that the effects have been and continue to be particularly disruptive for groups that are already susceptible to social and economic changes, including fishing communities (Mulanda Aura et al. 2020). Fishermen experienced fishery shutdowns, interruptions to the global seafood market, and increased health risks amid existing regulatory and environmental challenges (Campbell et al.

2021). As these and other consequences continue to affect fishermen and fishing communities, fisheries social science research can help to understand the socioeconomic dimensions of the pandemic and support community needs by communicating issues and recommendations to advance advocacy efforts (Bennett et al. 2020).

Before the pandemic started, our Project Team was engaged in an ongoing study to gather and communicate information about the health and well-being of fishing communities in California, including impacts from marine protected areas (MPAs). A key goal of this project is to convey fishermen's perspectives about the unique challenges and opportunities their fishing communities are facing to managers and decision makers. Upon beginning data collection, our team recognized that capturing COVID-19 impacts on fishing communities was both timely and necessary. As such, this paper explores the effects that COVID-19 has had on

fishing communities and fisheries social science research in California.

### Methods

The Project Team is conducting virtual focus groups with commercial fishermen in each of the major California ports. To date, we have hosted 15 focus groups with a total of 73 participants. We anticipate completing the remaining four focus groups in the coming weeks.

For each focus group, three to eight fishermen representing a range of fishing interests gathered via Zoom to provide their perspectives on their fishing community's health and well-being, effects from COVID-19, and impacts from MPAs. The Project Team selected participants based on their awareness of the state of their port and ability to speak beyond their individual perspective, in addition to demographic factors including fishery of participation, level of experience in the fishery, and familiarity with other focus group participants.

The focus group structure led participants through a deliberative process to rate and discuss 20 questions related to environmental, economic, and social well-being, and MPA impacts. Facilitators posed a question and asked participants to rate their community on a five-point Likert scale using Zoom polls. After participants selected their ratings, facilitators displayed the spread of individual data and asked participants to discuss the areas where their scores differed or, in some cases, coincided. This open-ended discussion allowed for the collec-

tion of qualitative data to provide context for the quantitative ratings. Following the discussion, participants scored the same question again to see whether the conversation changed any individual ratings and shifted the group toward a more consensus-based or collaborative rating. These second scores are considered the final rating for the port's fishing community.

### Results

We received a total of 51 quantitative responses related to COVID-19 impacts across 11 ports (Table 1). An overwhelming majority of respondents reported that COVID-19 was highly disruptive to their port's fishing operations (Figure 1). One Orange County fisherman explained: "The COVID thing basically killed us, [...] that was a kiss of death. As soon as I saw that on the TV, I texted [name redacted] and I said 'we're in trouble,' and the buyers basically quit coming down [to port] a week later. That was it. They were done." Fishermen out of Eureka experienced similar market effects: "We were looking at a situation where there [were] going to be no

buyers for our seafood products. We were getting ready to go salmon fishing while the crab price was tanking and our buyers wouldn't even commit to buying one load."

Nearly a quarter of respondents indicated that COVID-19 did not have much of an effect for fishermen in their port (Figure 1). Some experienced new market opportunities, as did this Shelter Cove fisherman: "When rock cod season opened up, people weren't going into town and going to grocery stores; they wanted to stay home. So all I had to do was text a few people and we would have our orders before we even went fishing so we knew how much to catch." While similar responses to the pandemic helped to offset losses elsewhere, nearly all participants felt the economic impacts of restaurant closures following statewide social distancing measures.

### Discussion/Conclusion

Preliminary findings reveal that ports across California have unevenly experienced the pandemic and fishermen have relied on an array of creative adaptation strategies.

**Table 1.** Number of participants per focus group who responded to the COVID-19 question.

Port/Port Group	Number of Respondents
Trinidad	3
Eureka	7
Shelter Cove	4
Fort Bragg/Albion	5
San Francisco Area Ports	4
Princeton - Half Moon Bay	7
Santa Cruz	5
Moss Landing/Monterey Bay	4
Morro Bay - Port San Luis	4
Ventura/Channel Islands Area Ports	3
Orange County Area Ports	5
Total	51

100 Cook, Kia

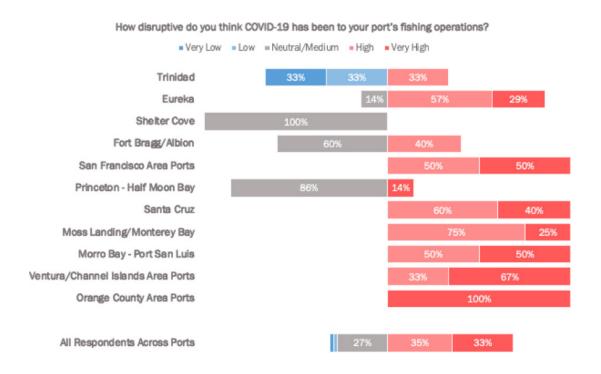


Figure 1. Distribution of responses to the COVID-19 question across focus groups.

For ports that depend heavily on local food retail markets, fishermen turned to direct to consumer sales, often selling their product on the docks. Others, like in Santa Barbara, leveraged their position as seafood suppliers to give back to their communities and donate what they could not deliver to market to local food banks. Similarly, while uncertain market opportunities initially deterred fishermen from fishing, many returned to the ocean either out of necessity or because their job gave them some sense of normalcy. Evidently, continuing fisheries social science research is crucial during this disruptive time, and our team has learned several lessons about ways to continue engagement with fishermen through virtual approaches, including sending meeting materials in advance, hosting Zoom training and orientation, and providing compensation for their time.

### References

Bennett, N. J., Finkbeiner, E. M., Ban, N. C., Belhabib, D., Jupiter, S. D., Kittinger, J. N., ... & Christie, P. (2020). The COVID-19 pandemic, small-scale fisheries and coastal fishing communities. *Coastal Management*, 48(4), 336–347.

Campbell, S. J., Jakub, R., Valdivia, A., Setiawan, H., Setiawan, A., Cox, C., ... & Box, S. (2021). Immediate impact of COVID-19 across tropical small-scale fishing communities. *Ocean and Coastal Management*, 200, 1-10.

Kumaran, M., Geetha, R., Antony, J., Kumaraguru Vasagam, K. P., Anand, P. R., Ravisankar, T.,

... & Vijayan, K. (2021). Prospective impact of corona virus disease (COVID-19) related lockdown on shrimp aquaculture sector in India – a sectoral assessment. Aquaculture, 531, 1-7.

Mulanda Aura, C., Nyamweya, C. S., Odoli, C. O., Owiti,
H., Njiru, J. M., Otuo, P. W., ... & Malala, J. (2020).
Consequences of calamities and their management:
The case of COVID-19 pandemic and flooding on inland capture fisheries in Kenya. *Journal of Great Lakes Research*, 46, 1767–1775.