

# Fulbright Association Hawai‘i Chapter Monthly Zoom



## Investigating Reefscapes of Fear: Life-size Models of Sharks can Provide Insights into Predator-Prey Interactions in Coral Reefs

Dr. Emily Lester

6 -7 p.m. Thursday, February 23, 2023

<https://hawaii.zoom.us/j/99299735266>

Meeting ID: 992 9973 5266

Emily completed her PhD at the University of Western Australia, where her research focussed on animal behaviour, trophic ecology, and the conservation of coral reefs. She is currently a Fulbright Postdoctoral Scholar in Dr. Elizabeth Madin's lab at the Mānoa campus, where she is using a combination of remote sensing and fish survey data to decode the information on predator populations that is provided by vegetation patterns on coral reefs called grazing halos.

Emily's research focuses on the ecological role of sharks in coral reefs. Specifically, she is interested in how the antipredator behaviours of fishes in response to the presence of sharks may lead to cascading effects through food webs. Such effects are difficult to observe as predator-prey interactions are rarely witnessed by humans. Using life-size models of predators in experimental setting offers a tractable avenue to overcome these challenges and provide a rare insight into interactions between reef sharks and other reef fishes. Her talk will provide an overview of three experiments using life-size models of predators and discuss how this approach can provide a mechanistic understanding of the behavioural changes that reef sharks can provoke in fishes.